S. Leger, Geoffrey

Access DB# 19223

SEARCH REQUEST FORM

(2)

Scientific and Technical Information Center

Requester's Full Name: GWEN LIANG Examiner #: 79180 Date: 10-31-02
Art Unit: 2123 Phone Number 305-3985 Serial Number: 09/599,735
Mail Box and Bldg/Room Location: CP II, 4B25 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Network-Attached Disk Unit with Data Protection Function and Server Protecting Data Stored In Network-Attached Disk Device

Inventors (please provide full names): WATANABE, Naoki; TAKAMOTO, Yoshifumi; ODAWARA, Hiroaki

Earliest Priority Filing Date: 06/25/99 ; Assignee: Hitach, Ltd. (No common assig

***For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.**

Main Concept: - A disk unit is connected to a server and a client.
- When a client requests a function execution to the server, the server, based on the user's information (e.g. access privileges), put together the information related to the function execution.
- The server then send the requested function (e.g. database retrieval command), together with the function related information (eg. access level) to the disk control unit.
- The disk is where the data is stored.
- The disk unit then integrate the received function and function information into one package and execute the function independant of the server.
- After the requested data is retrieved, the disk unit directly transfer the data to the requesting Clien

11-01-02 A11:45 IN

Claim focus - Claims 14, 20, 1 and 3 (one good reference and 2 drawings a

****

STAFF USE ONLY	Type of Search		Vendors and cost where applicable	
Searcher: GeoFFrey ST. Leger	NA Sequence (#)		STN	
Searcher Phone #: 308-7800	AA Sequence (#)		Dialog	✓
Searcher Location: 4B30	Structure (#)		Questel/Orbit	
Date Searcher Picked Up: 11/7/2	Bibliographic	✓	Dr.Link	
Date Completed: 11/8/2	Litigation		Lexis/Nexis	
Searcher Prep & Review Time: 3 hours	Fulltext	✓	Sequence Systems	
Clerical Prep Time:	Patent Family		WWW/Internet	
Online Time: 5 hours	Other		Other (specify)	

PTO-1590 (8-01)

File 275:Gale Group Computer DB(TM) 1983-2002/Nov 08
(c) 2002 The Gale Group
File 47:Gale Group Magazine DB(TM) 1959-2002/Nov 07
(c) 2002 The Gale group
File 621:Gale Group New Prod.Annou.(R) 1985-2002/Nov 06
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File 636:Gale Group Newsletter DB(TM) 1987-2002/Nov 08
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File 16:Gale Group PROMT(R) 1990-2002/Nov 08
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File 160:Gale Group PROMT(R) 1972-1989
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File 613:PR Newswire 1999-2002/Nov 08
(c) 2002 PR Newswire Association Inc
File 610:Business Wire 1999-2002/Nov 08
(c) 2002 Business Wire.

Set	Items	Description
S1	15764551	FUNCTION? ? OR COMMAND? ? OR QUERY OR QUERIE? ? OR REQUEST? ? OR TRANSACTION? ? OR TASK? ? OR JOB? ? OR OPERATION? ? OR PROCEDURE? ? OR DIRECTIVE? ?
S2	689150	S1(5N)(NODE? ? OR HOST? ? OR PC? ? OR COMPUTER? ? OR CLIENT? ? OR PROCESSOR? ? OR TERMINAL? ? OR DEVICE? ?)
S3	123452	(SECURITY OR CONFIDENTI? OR USAGE)(3N)(LEVEL? OR GRADE OR GRADES OR STANDING OR RANK? OR RATING OR CLASS??)
S4	17879160	AUTHORIZ? OR AUTHORIS? OR PERMISSION? ? OR PERMIT? OR CLEARANCE? ? OR APPROV? OR ALLOW? OR RIGHT? ? OR PRIVILEGE? ? OR ACCESS??? OR AUTHENTICAT? OR VERIF? OR VALIDAT? OR CREDENTIAL? ? OR ROLE? ?
S5	4876918	DISK? ? OR DISC? ? OR DISKETTE?? OR CDROM?? OR CD OR CDS OR DVD??? OR MINIDISK? ? OR MINIDISC? ? OR DRIVE OR DRIVES OR STORAGE OR PROXY
S6	156553	(RECORDING OR RECORDABLE OR WRITING OR WRITABLE OR WRITEABLE OR REPRODUCING OR REPRODUCIBLE OR REPRODUCTION OR STORING OR STORE? ?)(3N)(MEDIUM? ? OR MEDIA OR SURFACE OR UNIT? ? OR PROCESSOR? ? OR DEVICE? ?)

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S7     3471253   SERVER? ? OR WEBSERVER? ? OR DATABASE? ? OR DATA()BASE? ?
S8      802900   S3:S4(5N)S5:S7
S9      179619   S1(5N)S5:S6
S10     262430   S1(5N)S7
S11        344   S2(S)S8(S)S9(S)S10
S12        218   RD (unique items)
S13        171   S12 NOT PD>19990625
S14     137361   S1(5N)(SERVER? ? OR WEBSERVER? ?)
S15        133   S13(S)S14
S16     275187   S3:S4(5N)(SERVER? ? OR WEBSERVER? ?)
S17         88   S15(S)S16
S18      39226   NETWORK? ?(2N)ATTACH?(2N)(DISK? ? OR DISC? ? OR STORAGE) OR
                 (OFFLOAD??? OR OFF()LOAD???)(5N)(PROCESS? OR WORK OR S1)
S19       9373   S18(S)S3:S4
S20       5387   S19(S)S5:S6
S21       2405   S20(S)(SERVER? ? OR WEBSERVER? ?)
S22        669   S1(S)S21
S23       1881   S21(S)(NETWORK? ?()ATTACH?(2W)(DISK? ? OR DISC? ? OR STORA-
                 GE))
S24        997   S23(S)(S3 OR AUTHORIZ? OR AUTHORIS? OR PERMISSION? ? OR PE-
                 RMIT? OR CLEARANCE? ? OR APPROV? OR ALLOW? OR RIGHT? ? OR PRI-
                 VILEGE? ? OR AUTHENTICAT? OR VERIF? OR VALIDAT? OR CREDENTIAL?
                  ? OR ROLE? ?)
S25        195   S24 NOT PD>19990625
S26         97   RD (unique items)
S27         27   S1(S)S26
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27/3,K/1 (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2002 The Gale Group. All rts. reserv.

02299235 SUPPLIER NUMBER: 54717389 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Storage: Dell Expands PowerVault Storage Family With High-Performance Network File Servers. (Dell Computer PowerVault 700 family) (Product Announcement)
EDGE: Work-Group Computing Report, NA
May 10, 1999
DOCUMENT TYPE: Product Announcement LANGUAGE: English
RECORD TYPE: Fulltext
WORD COUNT: 985 LINE COUNT: 00088

... be added to the filers while the systems are running, without having to re-boot the servers or clients on the network.

"The introduction of **network - attached storage** products builds on our recent announcement of new PowerVault products for storage area networks and establishes a broader portfolio of storage options that Dell can...

...s Enterprise Systems Group. "PowerVault filers are ideal for customers with applications that drive heavy network traffic, such as e-mail, Web hosting and online **transaction** processing."

The Dell filer products are the result of its alliance with Network Appliance Inc. Dell and Network Appliance announced their alliance and planned OEM...

27/3,K/2 (Item 2 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2002 The Gale Group. All rts. reserv.

02230429 SUPPLIER NUMBER: 53095478 (USE FORMAT 7 OR 9 FOR FULL TEXT)
SAN Castles. (Company Business and Marketing)
PC Week, 78(1)
Oct 19, 1998
ISSN: 0740-1604 LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 367 LINE COUNT: 00032

As more data, information and **transactions** go online, the **role** played by **storage** and **storage** management grows. **Storage** area networks are the result. In theory, they let users eliminate islands of **storage** dedicated to single **servers** and create a network of data, tied together by Fibre Channel connections, that can be shared by multiple computers with different operating systems. SANs can make more data available to more users more quickly than ever. And SANs seem to have an edge over a rival, **network - attached storage** , which requires each **storage** node to run its own operating system.

Which brings us back to the Veritas acquisition. It may raise eyebrows now, but it could earn dividends...

27/3,K/3 (Item 3 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2002 The Gale Group. All rts. reserv.

02173621 SUPPLIER NUMBER: 20528963 (USE FORMAT 7 OR 9 FOR FULL TEXT)
'Thin' comes to drivers. (Creative Design Solutions Plug & Stor family of thin servers and storage modules) (Product Announcement)
Bournellis, Cynthia
Electronic News (1991), v44, n2215, p52(2)
April 20, 1998
DOCUMENT TYPE: Product Announcement ISSN: 1061-6624 LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 678 LINE COUNT: 00054

...ABSTRACT: as a back-up to servers and client devices. Plug & Stor is a

specialized network system that acts as a plug-and-play device to **allow** IT departments to manage storage without having to power down their networks. The system performs this **function** by automatically backing up data through a Web browser-based communications interface. The system offers **network - attached storage** to **allow** Windows and Unix clients on the same network to share files from one **server** . Plug & Stor combines the functionality of a thin **server** and a thin **storage** device. Plug & Stor meets the needs of a huge market looking for cost-effective ways of managing **storage** .

27/3,K/4 (Item 4 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

02171392 SUPPLIER NUMBER: 20460732 (USE FORMAT 7 OR 9 FOR FULL TEXT)
ARTECON BUYS NASDAQ LISTING THROUGH STORAGE DIMENSIONS.
Computergram International, n3382, pCGN04030024
April 3, 1998
ISSN: 0268-716X LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 369 LINE COUNT: 00031

TEXT:
Veteran Unix systems integrator Artecon Inc has now won **approval** for its planned merger with RAID systems supplier **Storage** Dimensions Inc, plans for which first emerged at the very end of last year. The **transaction** involves the issue of 13.3 million new shares of **Storage** Dimensions common stock for all outstanding Artecon shares, and will be accounted for as a purchase by Artecon of approximately $31.7m. Artecon, a privately held company based in Carlsbad, California, keeps its name and its chief executive officer, James Lambert, but takes on **Storage** Dimension's Nasdaq listing under the new symbol ARTE. The new company says its combined parts give it a broader line of **server storage** systems for the PC LAN and Unix markets, with products in both **server** and **network - attached storage** , enterprise **storage** management and tape backup. Artecon, which was founded in 1984, shifted direction towards **storage** in the early 1990s, and acquired **storage** vendor Falcon Systems Inc last August, a company with revenues of around $55m. It now offers RAID systems for telecommunications and internet applications under the Extreme product name. Milpitas, California-based **Storage** Dimensions Inc was the result of a $21m buy-out of a Maxtor Corp subsidiary in 1992, and started its life as a public company...

...Gene Bowles recently jumped ship to become president and chief executive officer of Database Excelleration Systems Inc, the Santa Clara, California-based intelligent solid state **disk** company, and most of the other senior management appear to have left. One reason for the merger is to bolster the sales team, which will...

27/3,K/5 (Item 5 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

02128294 SUPPLIER NUMBER: 20087893
LAN storage gets I/O boost. (network-attached storage devices) (Technology Information)
Mendel, Brett
LAN Times, v14, n24, p1(2)
Nov 24, 1997
ISSN: 1040-5917 LANGUAGE: English RECORD TYPE: Abstract

ABSTRACT: New strains of **network - attached storage** devices are being introduced by manufacturers of more conventional data **storage** solutions in an attempt to offer IS managers the ability to minimize I/O transmission bottlenecks. Companies such as RARE Systems, Legacy **Storage** Systems, Retrieve and MicroNet Technology are each preparing products that leverage the infrastructure of an entire network rather than one host **server** for

hard- **disk** **storage** . These devices include realtime operating systems and embedded file systems, thus **allowing** a network's **server** to concentrate processing rather than handling I/O file **requests** . Further, the ability of these devices to concurrently manage multiple file-system protocols provides users with more flexibility in adding **storage** .

27/3,K/6 (Item 1 from file: 621)
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

01889568 Supplier Number: 54784034 (USE FORMAT 7 FOR FULLTEXT)
Microtest Announces Relocation of Enterprise Group to Phoenix.
Business Wire, p1157
June 3, 1999
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 377

... unify the Network Attached Storage Division in one location, and provide significant cost saving benefits going forward."

Hren added, "We are committed to focusing our **Network Attached Storage** Division offerings on entry-level thin **servers** and transitioning from hardware products to software offerings for both LAN and Internet-enabled systems. This organizational change will enhance these product development efforts, and **allow** our **operations** to **function** more effectively."

Founded in 1984, Microtest is a leading worldwide manufacturer of network test and measurement and network attached storage products for local area and...

27/3,K/7 (Item 2 from file: 621)
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

01738749 Supplier Number: 53123114 (USE FORMAT 7 FOR FULLTEXT)
Storage Concepts Expands Real-Time Storage Offerings with FibreRAID Express and HDDS.
PR Newswire, p9314
Oct 26, 1998
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 944

... Ultra SCSI systems.

The product supports high-end IRIX host systems as well as lower cost PCI host systems for markets ranging from video and **network attached storage** to government, military and medical imaging. "At 80 MB/s, the system can support multiple simultaneous streams of CCIR-601 quality video, medical image sequences...

...data and image capture sequences," adds Bock, "and its fully protected RAID architecture will prove to be a key benefit for video and mission critical **server** environments." Fault tolerant **operation** is guaranteed with a parity **disk** and on-the-fly hardware error correction. Hot-pluggable **disk drives** with background reconstruct **permit** the replacement of a failed **drive** while the system continues to provide real-time data. The FibreRAID Express comes equipped with a dual 1.062 Gb/s Fibre Channel interface to...

...support drivers are available for a wide variety of platforms, including PC/NT, SGI-GIO/HIO/PCI/XIO, and Mac. Using cost effective 9 GB **disk drives** , each chassis can support up to 72 GB of **storage** capacity. Using arbitrated loop, up to 126 chassis can be added for virtually unlimited **storage** over an industry standard Fibre Channel interface. Optional redundant power supplies, redundant cooling systems and remote systems control, independent of real-time data transfers provide high- availability

operation for critical applications.

Storage Concepts' FibreRAID HDDS solution targets high-end market applications requiring extremely fast transfer rates, fault-tolerant operation and large storage requirements...

27/3,K/8 (Item 3 from file: 621)
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

01690778 Supplier Number: 50236347 (USE FORMAT 7 FOR FULLTEXT)
CommVault's DBVault MAGNUM Revolutionizes Storage Management For Distributed Database Backup And Recovery
PR Newswire, p810NEM011
August 10, 1998
Language: English Record Type: Fulltext
Article Type: Article
Document Type: Newswire; Trade
Word Count: 1485

... The DBVault MAGNUM product is an extension of CommVault's Vault98(TM) storage management software family.

The MAGNUM software is designed for distributed environments where **network - attached storage** management streamlines administration of multiple databases and reduces costs through sharing of back-end **storage** media. The product provides centralized **storage** management, scheduled and automated backup and flexible recovery options of mixed database environments via a single integrated GUI. Operating with CommVault's central **storage server** , MAGNUM transfers data via parallel data transmission paths and adapts to the customer's network topology, bandwidth and hardware configurations. Additionally, this solution combines the advantages of over-the-network **operation** with the high-speed throughput demanded for large mission-critical databases. Through MAGNUM, DBAs can administrate databases stored on multiple dispersed **servers** from a single CommVault **server** console. This **allows** DBAs to automate backup **procedures** , centralize policies and perform restore **operations** via local or remote network connections.

"We developed the MAGNUM software based on solving database recovery from the DBAs viewpoint. Their perspective taught us that...

27/3,K/9 (Item 4 from file: 621)
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

01690107 Supplier Number: 50233254 (USE FORMAT 7 FOR FULLTEXT)
REPEAT/ CommVault's DBVault MAGNUM Revolutionizes Storage Management for Distributed Database Backup and Recovery.
Business Wire, p08101241
August 10, 1998
Language: English Record Type: Fulltext
Article Type: Article
Document Type: Newswire; Trade
Word Count: 1442

... The DBVault MAGNUM product is an extension of CommVault's Vault98(tm) storage management software family.

The MAGNUM software is designed for distributed environments where **network - attached storage** management streamlines administration of multiple databases and reduces costs through sharing of back-end **storage** media. The product provides centralized **storage** management, scheduled and automated backup and flexible recovery options of mixed database environments via a single integrated GUI. Operating with CommVault's central **storage server** , MAGNUM transfers data via parallel data transmission paths and adapts to the customer's network topology, bandwidth and hardware configurations. Additionally, this solution combines the advantages of over-the-network **operation** with the high-speed throughput demanded for large mission-critical databases. Through MAGNUM, DBAs can

administrate databases stored on multiple dispersed **servers** from a single CommVault **server** console. This **allows** DBAs to automate backup **procedures** , centralize policies and perform restore **operations** via local or remote network connections.

"We developed the MAGNUM software based on solving database recovery from the DBAs viewpoint. Their perspective taught us that...

27/3,K/10 (Item 5 from file: 621)
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

01655980 Supplier Number: 48491618 (USE FORMAT 7 FOR FULLTEXT)
Japanese PC Giant Establishes US Product-Development Subsidiary
PR Newswire, p519SFTU063
May 19, 1998
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 535

... variety & combination of software, hardware and premium support & services to their customer base.

T-Zone C&R already offers several PC products. Its mixed-media **server** (TM), a new concept in built-to-order **network - attached storage servers** , ships ready to install and simultaneously supports a variety of **storage** media like **CD** -ROM, Hard **Disk** (RAID), Jazz & Zip **drives** that are all plug-n-play and support NT, Windows 95 & UNIX platforms. Setup takes only a few minutes, saving customers hours of laborious configuration **procedures** . This new approach to managing your data **allows** you to **access** and maintain your data anywhere on your network or Web Site. The starting price is $1,995.

T-Zone C&R will release Opera(TM...

27/3,K/11 (Item 6 from file: 621)
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

01601477 Supplier Number: 48245714 (USE FORMAT 7 FOR FULLTEXT)
Transoft Announces 'Approved Peripherals Program' For Its StudioBOSS Fibre Channel Networking Solutions.
Business Wire, p01260307
Jan 26, 1998
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 556

... Transoft's position as a world-class networking company.

According to Michael Klein, Transoft's President and CEO, the company is a forerunner in developing **Storage** Area Networks (SAN). The flexible, open-systems environment fostered by the StudioBOSS software **allows** users to **access network - attached** mass **storage** simultaneously, removing bottlenecks caused by **servers** or network protocols. "We've built a solid reputation providing users with a SAN environment that offers the most flexible installation and **operation** . In conjunction with our **Approved** Peripherals partners, we now offer even greater customization and adaptability."

Partners in the program enthusiastically expressed their support for the approved peripheral concept.

"Box Hill...

27/3,K/12 (Item 1 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)

03885714 Supplier Number: 48493763 (USE FORMAT 7 FOR FULLTEXT)
-PROCOM: Procom enters the network attached storage disk array market with

NetFORCE 1000
M2 Presswire, pN/A
May 22, 1998
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 1091

(USE FORMAT 7 FOR FULLTEXT)
TEXT:
M2 PRESSWIRE-22 May 1998-PROCOM: Procom enters the **network attached storage disk** array market with NetFORCE 1000 (C)1994-98 M2 COMMUNICATIONS LTD RDATE:210598 -- Procom's NetFORCE 1000 offers a direct network attached, high performance, high availability and easy to install data- **access storage** solution for the enterprise Procom Technology, Inc. (NASDAQ: PRCM) today released NetFORCE 1000, the first in a series of high performance **disk** -based **network attached storage** (NAS) solutions equipped with software that provides cross-platform support for sharing information across the network. NetFORCE 1000 is an enterprise-class solution designed for **storage** requirements of 90 gigabytes to 900 gigabytes in multi-protocol environments. NetFORCE 1000, a highly fault-tolerant, modular and scaleable **storage** solution, can be configured to meet customers' **storage** requirements today, and provides high performance and complete flexibility to expand capacity. "We are offering a fast, reliable, and easy to install NAS product with a low total cost of ownership," said Dr. Homayoun Yousefizadeh, Procom's Enterprise **Disk Storage** Product Manager. "NetFORCE is the ideal **storage** product designed to enhance the speed and availability of network data, by utilizing a high performance file system and RAID functionality including failover. NetFORCE also addresses the demand for more affordable **storage** which the growing use of intranets and extranets have created." Procom's Chief Executive Officer, Alex Razmjoo said, "Procom has been building NAS **CD** -ROM products for over three years. We have developed core NAS technologies which provide cross-platform support for today's broad range of operating systems and file services. Our entrance into **disk** -based NAS products represents a revolutionary shift for our entire company. Procom Technology will become the undisputed leader in NAS products with a complete line of NAS devices for all **storage** media, from **CD** - and **DVD** -ROM products to **disk** arrays and backup applications." Razmjoo continued, "The NetFORCE products will put us in a great position to aggressively penetrate this fast-growing **disk** array market, which analysts have projected at over $8 Billion within five years. Our distribution and reseller partners will be instrumental in delivering these products to corporate America." Dr. Yousefizadeh added, "NetFORCE will be targeted at Internet Service Providers (ISP's) as well as data warehousing, web **server** , e-mail and CAD applications where NFS, CIFS and HTTP protocols are standard. NetFORCE 1000 addresses the performance, scalability, availability, interoperability and installation needs that customers expect when purchasing **storage** solutions." Performance **Access** times, transfer rates and application response times improve dramatically when data files are taken off of the file **server** and attached directly to the network. NetFORCE, equipped with a 64-bit operating system, acts as a data pump when clients **request** information. Since NetFORCE is handling data **requests** , file **server** performance is improved for application and administrative **tasks** . Based on in-house LADDIS tests, NetFORCE delivers up to 2,700 i/ops and **access** times as low as 1.2 milliseconds. NetFORCE incorporates Procom's Reliant 1000 RAID systems which are available with an Ultra-Wide SCSI interface and...

...are 40MB/sec using an Ultra-Wide SCSI connection and 100MB/sec using a Fibre Channel connection. Scalability NetFORCE can be configured with five 10- **drive** modules for a total capacity of 900GB. Customers can start with a 90GB solution and easily and cost effectively scale up to 900GB as their capacity needs change. Additional NetFORCE solutions may be daisy-chained to **allow** multiple terabytes of **storage** . Availability NetFORCE is equipped with active failover support using active-active RAID controller technology. NetFORCE supports RAID levels 0-5 and global hot-sparing, along with the SAF-TE standard for fault tolerant systems. It also features dual data paths, redundant hot-swappable power supplies and fans, and hot-swappable **drive** canisters. Interoperability NetFORCE is a perfect

file sharing solution for today's diverse operating environment. It takes advantage of Network File System (NFS) to be...

...solution that directly attaches to the network using Ethernet, Fast Ethernet or FDDI/CDDI interface with effortless administration. Software The heart of the NetFORCE data- **access server** is the embedded software package, which **allows** the centralized management of distributed **storage** and processing, and provides mainframe **storage** discipline to the heterogeneous client/ **server** environment that exists in most organizations today. NetFORCE relies on a secure encryption model for transferring data over the network and password protected administration. NetFORCE...

...GUI that provides centralized system management. NetFORCE contains an internal self-test, and full SNMP failure functionality including e-mail notification and paging, and administrator **access** . Standard Software features include: - Efficient **Storage** OS - Journaling File System - Compact OS - 64-bit Architecture Hardware NetFORCE's hardware consists of several interconnected hardware components: CPU module, controllers, hard **drives** and UPS. Standard Hardware Features include: - Ultra-Wide SCSI Implementation - RAID Levels 0-5 - Full Redundancy Support - UPS Support - LCD Panel - 19-Rack Mountable Units Price Prices range from $73,275 (MSRP) for a 90GB system to $278,405 (MSRP) for a fully configured 50- **drive** 900GB system. Support/Warranty Procom backs its NetFORCE products with a three-year parts warranty and 90-days on-site service plus toll-free technical...

...www.procom.com or e-mail at info@procom.com. About Procom Irvine, California-based Procom Technology, Inc. designs, manufactures and markets enterprise-wide intelligent **storage** solutions including **CD** -ROM, **DVD** -ROM, Tape, RAID and **Disk** -based NAS solutions for major hardware platforms, operating systems and network protocols. The integrated network **storage** solutions contain a high level of software value add that address the complexity of implementing sophisticated **storage** within an enterprise-wide network. The company's high-end networking products are targeted to Fortune 1000 companies and government agencies. Procom has offices in...

27/3,K/13 (Item 2 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)

03834074 Supplier Number: 48327180 (USE FORMAT 7 FOR FULLTEXT)
TRANSOFT INTRODUCES APPROVED PERIPHERALS PROGRAM
Networks Update, v10, n3, pN/A
March 1, 1998
Language: English Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 502

... Transoft's position as a world-class networking company.
According to Michael Klein, Transoft's president and CEO, the company is a forerunner in developing **Storage** Area Networks (SAN). The flexible, open-systems environment fostered by the StudioBOSS software **allows** users to **access network - attached** mass **storage** simultaneously, removing bottlenecks caused by **servers** or network protocols. "We've built a solid reputation providing users with a SAN environment that offers the most flexible installation and **operation** . In conjunction with our **Approved** Peripherals partners, we now offer even greater customization and adaptability."
Partners in the program enthusiastically expressed their support for the approved peripheral concept.
"Box Hill...

27/3,K/14 (Item 1 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

05284277 Supplier Number: 48048119
Tricord Systems is busy reinventing itself.
Youngblood, Dick
Star Tribune (Minneapolis, MN), pD1
Oct 13, 1997
Language: English Record Type: Abstract
Document Type: Newspaper; Trade

ABSTRACT:
Tricord Systems Inc. (Plymouth, MN) is developing an innovative approach called **network - attached storage** that **allows storage** and management of data on computer systems. The new product being developed is in line with the company's shift from the hardware business to the more profitable software development. The new network-attached software basically **allow** the processing of network **requests** for data **access** and retrieval to be transferred from the **server** to a separate, file-intelligent **storage** system. Furthermore, the innovative product also **allows** users to add a virtually unlimited amount of **storage** without the time-consuming and expensive process of shutting off and reconfiguring a system. According to company CEO John Mitcham, the new product is slated...

27/3,K/15 (Item 2 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

05220753 Supplier Number: 47963349 (USE FORMAT 7 FOR FULLTEXT)
Thin Client Movement Sparks Debate On Storage Models
Moozakis, Chuck
InternetWeek, p31
Sept 8, 1997
Language: English Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 570

... 100-person software development firm in Monterey, Calif. "For thin client to be viable for us, there has to be some [cost-effective] storage solution."

Storage vendors--including Seagate (www.seagate.com), EMC (www.emc.com) and others--are seeking to make thin-client implementation more palatable by pitching products and architectures that adhere to a **network - attached storage** model, which **allows** high-speed **access** to data from centralized **storage** without going through a network **server** . The first of these models is based on external **disk** subsystems embedded in a limited **function server** . The second, more powerful and more expensive model is based on clustering high-capacity devices with a multifunction RAID controller.

Both approaches do have merit...

27/3,K/16 (Item 3 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

04301089 Supplier Number: 46304051 (USE FORMAT 7 FOR FULLTEXT)
EMC hunts for solution to bottlenecks
InfoWorld, p016
April 15, 1996
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 427

... data from a storage device over the network.

The software, called Data Access in Real Time, acts as a front end to the ICDA system, **allowing** the storage system to receive **requests** for file access directly from the network. The software **allows** the intelligent storage system to stream data to the **network** clients.

The new network-attached storage systems, based on EMC's ISA, will include a video server application for streaming video over a network; a...

27/3,K/17 (Item 1 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2002 The Gale Group. All rts. reserv.

10936133 SUPPLIER NUMBER: 53978597 (USE FORMAT 7 OR 9 FOR FULL TEXT)
new products: hardware.
EMedia Professional, 12, 2, 17(1)
Feb, 1999
ISSN: 1090-946X LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 1939 LINE COUNT: 00155

... to the company, the NetFORCE 100 data transfer rate is 20 percent faster, while carrying a price tag 30 percent lower, than entry-level application **servers** with equivalent **storage** . A Web-based GUI **allows** a network administrator to manage the RAID **operations** , and network setup and maintenance, over the Internet. Any component failure automatically triggers email notification, and the unit can be optionally configured to send error messages to an alphanumeric pager. The same GUI also supports optional tape backup **operations** for the NetFORCE 100.
(Procom Technology Inc., 2181 Dupont Drive, Irvine, CA 92612; 949/852-1000; Fax 949/794-4368; http://www.procom.com)
TEAC...

...Supports RAID 0,1,5
Boffin Limited has introduced the third product in its family of network-attachable storage devices. KwikRAID is a platform- and **operation** system-independent RAID **server** that supports RAID 0, 1, and 5. RAID 0 provides **disc** striping across multiple **discs** ; RAID 1 provides **disc** mirroring or shadowing, **allowing** users to "redundantly" back up information from one **disc** to another; and RAID 5 **allows** data to be striped block-by-block across multiple **discs** . KwikRAID attaches directly to any 10/100 LAN and features fast set-up for multi-protocol networks. While supporting a high number of concurrent users, KwikRAID ensures user security and proper **access** with password protection at Share, Group, or User levels. KwikRAID devices can be managed and configured via a Java-compliant Web browser and run from UNIX or Windows clients. As a standard feature, Boffin offers hot-swappable power supplies and hot-swappable **drives** for KwikRAID. For a 9GB KwikRAID system that is expandable to 504GB, pricing begins at $9,995.
(Boffin Limited, 2500 West County Road 42, Suite...

27/3,K/18 (Item 2 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2002 The Gale Group. All rts. reserv.

10464212 SUPPLIER NUMBER: 20919305 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Sharing from scratch: how to network CD-ROM. (includes related articles on digital video disks, alternative optical storage devices, and case studies)
Doering, David
EMedia Professional, v11, n8, p32(9)
August, 1998
ISSN: 1090-946X LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 4661 LINE COUNT: 00358

... drives for use on the network. This would provide each title with its own drive and therefore reasonable performance. However, this number of drives is **right** at the upper end for a tower solution handled by a network OS or a single CPU in the case of a **network - attached storage** (NAS) device. Beyond that, there's a drop in performance in trying to service **requests** to that many devices. However, administrators can engineer higher performance by mirroring the contents of one or more of those **CD** -ROMs to the **server** 's hard **disk** . Microtest offers this

capability in their DiscPort product.
If the number of titles grows, consider purchasing a jukebox. With pricing under $3,000, the Sony...

27/3,K/19 (Item 3 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB

08605049 SUPPLIER NUMBER: 18203116 (USE FORMAT 7 OR 9 FOR FULL TEXT)
EMC hunts for solution to bottlenecks. (enhances storage systems) (Company Business and Marketing)
Vadlamudi, Pardhu
InfoWorld, v18, n16, p16(1)
April 15, 1996
ISSN: 0199-6649 LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 447 LINE COUNT: 00039

... data from a storage device over the network.
The software, called Data Access in Real Time, acts as a front end to the ICDA system, **allowing** the storage system to receive **requests** for file access directly from the network. The software **allows** the intelligent storage system to stream data to the **network** clients.
The new network-attached storage systems, based on EMC's ISA, will include a video server application for streaming video over a network; a...

27/3,K/20 (Item 1 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

01743384 03-94374
Host-attached vs. network-attached storage: Which is right for your network?
Kao, Philip
Computer Technology Review v18n11 PP: 60-62 Nov 1998
ISSN: 0278-9647 JRNL CODE: CTN
WORD COUNT: 2884

...TEXT: each server is 60 percent or more, then adding more storage onto the server will not increase network productivity or efficiency.

A stronger argument for **network - attached storage** is for simplicity. Several **servers** may be tied to each other through cross mounts and shared directories. **Network - attached storage** breaks the co-dependency and **allows** each **server** to **function** independently, thus **allowing** for more efficient use of current topology.

Additionally, expansion is required for a specific serverbased application only. Access times for local disks will increase significantly...

27/3,K/21 (Item 2 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

01733535 03-84525
New architectures build network storage
Ferelli, Mark
Computer Technology Review Storage Inc. Supplement PP: 12-14 Third Quarter 1998
ISSN: 0278-9647 JRNL CODE: CTN
WORD COUNT: 1119

ABSTRACT: **Storage** on the network is burdened with higher demand for capacity both on- and near-line. Applications are growing in capacity demand, graphics are notorious space-hogs, and bandwidth can only support so much. Network **storage** was, at one time, a matter of the **right**

hardware and the **right** software, a reliance on RAID technology and a constant tradeoff between uptime, downtime, and constant performance penalties. The future is now in the development of **storage** architectures, which liberate the applications **server** to do its **job** . The architectures reorganize thinking about how file traffic is managed. One is the **storage** area network. **Access** , connectivity, scalability, and manageability are also addressed by **Network Attached Storage servers** .

27/3,K/22 (Item 3 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

01422667 00-73654
NDMP: Beating the backup blues
Boberg, Richard
Network World v14n20 PP: 37 May 19, 1997
ISSN: 0887-7661 JRNL CODE: NWW
WORD COUNT: 696

ABSTRACT: The Network Data Management Protocol (NDMP) **Task** Force is working on enhancements to its NDMP specification, which defines backup over the network from a network **storage** node to a backup media node. The enhancements will **allow** backup data to be directed to any NDMP-compliant network node. This gives the administrator the ability to locate the backup device on the backup host or on a 3rd node on the network, resulting in a 3-way backup architecture. The NDMP **Task** Force launched its initiative in order to create an open standard protocol for **network** -based backup for **network - attached storage** . The protocol **allows** backup and network-attached file **server** vendors to focus investment on functionality instead of excessive porting. ...
...TEXT: a tape or tape library.

The tape device may be physically attached to the file server host or backup host.

What is NDMP?

The NDMP **Task** Force launched its initiative in order to create an open standard protocol for network-based backup for **network - attached storage** . The protocol **allows** backup and network-attached file **server** vendors to focus investment on functionality instead of excessive porting.

It also gives users an unprecedented level of choice and interoperability.

NDMP addresses the problem...

27/3,K/23 (Item 1 from file: 9)
DIALOG(R)File 9:Business & Industry(R)

02487622 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Pioneer Ships Network-Ready Cache Changer
(Pioneer New Media Technologies shipping DRM-6NX, a compact storage solution combining hard drive caching, network interface and six-disc CD-ROM changer)
EMedia Professional, v 12, n 6, p 20
June 1999
DOCUMENT TYPE: Journal ISSN: 1090-946X (United States)
LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 252

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:
Pioneer New Media Technologies, Inc. is shipping DRM-6NX, a compact

storage solution that combines hard **drive** caching, a network interface, and a six- **disc** **CD** -ROM changer in a single device. This **network** - **attached** **storage** solution provides multiple users with fast **access** to data stored on **CD** -ROMs without routing through a file **server** . Pioneer's new cache changer is based on its earlier DRM-6324X, a six- **disc** changer using 24X **drives** . Like its predecessor, the DRM-6NX offers a six- **disc** removable magazine, which enables offline **storage** of **CD** -ROMs. Designed for use with 100BASE-T or 10BASE-T Ethernet networks, DRM6X is fully compatible and works in environments using NetWare, OS/2, Windows, DOS, UNIX, or a Web browser. With its combination of an internal hard **drive** for data caching and a six- **disc** changer, 6NX provides multiple users with **access** to the contents of up to 14 **CD** -ROMs. Users can cache entire **discs** or only their most frequently used data in order to optimize file **access** across a greater number of **CDs** . Using 6NX's SCSI expansion port, as many as five additional **CD** -ROM six- **disc** changers or **drives** can be simultaneously connected. The DRM-6NX **allows** system control through a Web screen browser, which provides a tool for administrative **tasks** such as network settings, **access** **rights** , caching options, and **server** status monitoring. DRM-6NX has a suggested retail price of $2495. The DRM-6324X changer is available for $495 and additional magazines sell for $25...

27/3,K/24 **(Item 2 from file: 9)**
DIALOG(R)File 9:Business & Industry(R)

01928575 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Thin Client Movement Sparks Debate On Storage Models
(Companies considering thin clients are finding that the costs associated with storing data in a server-centric environment can halt their plans)
InternetWeek, p 31
September 08, 1997
DOCUMENT TYPE: Journal ISSN: 0746-8121 (United States)
LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 639

(USE FORMAT 7 OR 9 FOR FULLTEXT)

ABSTRACT:
...Storage vendors-including Seagate, EMC and others-are seeking to make thin-client implementation more palatable by pitching products and architectures that adhere to a **network** - **attached** **storage** model, which **allows** high-speed **access** to data from centralized **storage** without going through a network **server** . The first of these models is based on external **disk** subsystems embedded in a limited **function** **server** . The second, more powerful and more expensive model is based on clustering high-capacity devices with a multifunction RAID controller.
David Anderson, director of system...

TEXT:
...com), EMC (www.emc.com) and others-are seeking to make thin-client implementation more palatable by pitching products and architectures that adhere to a **network** - **attached** **storage** model, which **allows** high-speed **access** to data from centralized **storage** without going through a network **server** . The first of these models is based on external **disk** subsystems embedded in a limited **function** **server** . The second, more powerful and more expensive model is based on clustering high-capacity devices with a multifunction RAID controller.

Both approaches do have merit...

27/3,K/25 **(Item 1 from file: 674)**
DIALOG(R)File 674:Computer News Fulltext

069187
San Storm

Storage-area networks are forecast to provide higher availability of storage data and better server performance.

Byline: SANDRA GITTLEN
Journal: Network World Page Number: 67
Publication Date: September 28, 1998
Word Count: 889 Line Count: 82

Text:

Ask Dwight Gibbs, chief technical fool at online financial advisor The Motley Fool, if he thinks **storage** -area networks (SAN) are a bunch of hooey. He'll tell you he just bet more than $15,000 on them.Gibbs is reconfiguring his corporate network to off-load **storage** from individual **servers** and move it to a SAN. SANs provide higher availability of data, broader scalability, easier management and improved **server** performance, according to vendors touting the newfangled networks.While the definition of this new technology is a bit hard to pin down, most vendors and users think of a SAN as a group of **storage** devices hooked together via a high-speed connection that is accessible by multiple **servers** . The **servers** can run on heterogeneous platforms, according to International Data Corp. (IDC), a research firm in Framingham, Mass. "The initial vision of SANs includes switches that provide dynamic any- **server** to any- **storage** connections and buildingwide, neighborhoodwide and campuswide topologies," a recent IDC report says. **Storage** devices can be linked via Fibre Channel, FDDI or any other non-network protocol.Gibbs, who expects to have a SAN from Network Appliance installed by the fourth quarter, says his Web **servers** were getting bogged down because each needed to store the same information. He is going to move graphics files and static HTML files that don't have to be parsed onto the SAN. "Why spend $45,000 on a **server** just to have it bogged down with I/O duties?" Gibbs says. Mainframe old-timersSANs have existed for years in the mainframe environment in the ...

... SCSI - a point-to-point, limited connection."About a year ago, Michael Peterson, president of Strategic Research in Santa Barbara, Calif., developed an alternative to **network - attached storage** . He thought **network - attached storage** was limiting because it relied on network protocols and didn't guarantee delivery.Peterson suggested that SANs could be interconnected using network protocols such as Ethernet, and the **storage** devices themselves could be linked via non-network protocols. According to Peterson, SANs have three major components: the interfaces, including SCSI, IBM Serial **Storage** Architecture or Fibre Channel; the interconnects, such as extenders, multiplexers, hubs, switches and routers; and the switching fabric. In a traditional **storage** environment, a **server** controls the **storage** devices and administers **requests** and backup. With a SAN, instead of being involved in the **storage** process, the **server** simply monitors it.By optimizing the box at the head of the SAN to do only file transfers, users are able to get much higher...

... as 100M bit/sec via Fibre Channel. Traditional SCSI connections offer transfer rates of only 40M bit/sec.Using Fibre Channel as the hookup between **storage** devices also increases distance options. While SCSI only **allows** a 25-meter stretch between machines, Fibre Channel supports spans of 10 kilometers. SCSI can only connect up to 15 devices, whereas Fibre Channel can...

... be enhanced over Fibre Channel, but there are still addressing issues and performance issues with the protocol itself," CNT's Kelhoff says. "While Fibre Channel **allows** for 100M bit/sec transfer rates, the SCSI protocol implementations don't take full advantage of this." SANs aren't cheapAlthough The Motley Fool's...

... for his SAN."This isn't something you can put together at Computer City," says Rob Davis, director of product marketing at Ancor Communications, a **storage** product developer in Minnetonka, Minn. Hewlett-Packard and Sun are building SAN capabilities into their **storage** boxes, Davis says.But Thomas Nolle, president of CIMI, a consultancy in Voorhees, N.J., says, "SANs don't merit the attention they are getting." He doesn't believe the need for **storage** is growing at a fast enough clip to

warrant all the notice.Because SANs are highly centralized, they're better suited for data centers than networks, Nolle says. He says there are only two instances in which SANs would make sense: if you want all your mass **storage** in one place but can't make the physical connection with SCSI or if you need failover capabilities. The next wave The SAN market for...

... to Strategic Research.Industry experts predict the next generation of SANs will take on additional duties in the network. "The next phase will be when **servers** aren't even dealing with **requests** ," Ancor's Davis says. "Instead, the SAN will talk directly to the client." Rick Franz, director of corporate marketing at SAN interface provider QLogic in Costa Mesa, Calif., says SANs will lead the way for other **tasks** to be **off - loaded** from the **server** . "Next, we'll take the file system off the **server** and put it into its own network," he says. "When you use the **server** to look at the file system on the network, then you **allow** it to act as a resource." l

27/3,K/26 (Item 1 from file: 813)

1275482 LATU066

Seagate Software Reveals Information Availability Strategy to Deliver a Comprehensive Solution for Network Storage Management

DATE: May 12, 1998 07:50 EDT WORD COUNT: 1,193

...of ownership."

The Information Availability strategy expands Seagate Software's data protection solutions beyond traditional PC LAN environments into emerging high-performance Fibre Channel and **Network Attached Storage** technologies. With a wide array of Windows NT, NetWare and Unix technologies, Seagate Software is integrating its existing products into a complete **storage** management solution. The four segments, which closely align with how IT professionals implement network **storage** management solutions, are data protection, data availability, centralized resource management and proactive policy management.

Data Protection - strives for total data protection from data loss on any **storage** platform. Seagate Backup Exec's **storage** solutions are robust and scalable, from the desktop to the enterprise, providing traditional backup, restore, data migration and disaster recovery capabilities for applications and databases as well as client data and open files. Further support for vaulting, image, tape RAID, media services and **Storage** Networking is planned.

Data Availability - manages network information to ensure users have continuous **access** to data. As a powerful new option to Seagate Backup Exec for Windows NT, Seagate Client Exec protects data created on Windows 95 and Windows NT Workstations transparently and automatically. With continuous **access** to their data, users are able to restore their own files. Clustering, system failover, versioning and replication are a few of the future technologies scheduled to ensure constant data **access** .

Centralized Resource Management - manages and controls distributed network **storage** resources from a central location to achieve zero downtime. Seagate Manage Exec helps ensure critical information is available to the user by simplifying problem resolution, maintaining healthy system performance, while increasing **server** uptime. Desktop management, media management, notification and **storage** resource management are effective solutions to centralize and share information through integration with current IT infrastructures. To continue to improve these efforts, integrated products that provide resource analysis, reporting, capacity planning, configuration and centralized **operations** are under development.

Proactive Policy Management - automates actions to ensure data protection and availability based upon user- defined policies or network events. These policies establish operating rules such as data prioritization, information **access** **rights** , automated data movement,

job scheduling, system health corrective actions and client configuration maintenance to intelligently handle network events. A possible future plan to utilize Seagate NerveCenter event-correlation technology is to identify unreachable or failed **storage servers** on the network and to take corrective actions which can include launching a Seagate Backup Exec **job** to a secondary backup **server** .

To round out its new product strategy and future initiatives, Seagate Software also plans to continue leveraging and integrating Business Intelligence technology from its award...

27/3,K/27 (Item 1 from file: 610)
DIALOG(R)File 610:Business Wire

00038493 19990503123B1096 (USE FORMAT 7 FOR FULLTEXT)
Dell Expands PowerVault Storage Family With High-Performance Network File Servers
Business Wire
Monday, May 3, 1999 09:22 EDT
JOURNAL CODE: BW LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
DOCUMENT TYPE: NEWSWIRE
WORD COUNT: 1,155

...be added to the filers while the systems are
running, without having to re-boot the servers or clients on the
network.

"The introduction of **network - attached storage** products builds on our recent announcement of new PowerVault products for storage area networks and establishes a broader portfolio of storage options that Dell can...

...s
Enterprise Systems Group. "PowerVault filers are ideal for customers with applications that drive heavy network traffic, such as e-mail, Web hosting and online **transaction** processing."

```
File 347:JAPIO Oct 1976-2002/Jun(Updated 021004)
         (c) 2002 JPO & JAPIO
File 350:Derwent WPIX 1963-2002/UD,UM &UP=200271
         (c) 2002  Thomson Derwent
File 348:EUROPEAN PATENTS 1978-2002/Oct W04
         (c) 2002 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20021031,UT=20021024
         (c) 2002 WIPO/Univentio

Set     Items   Description
S1        585   AU='WATANABE N':AU='WATANABE N M'
S2        115   AU='TAKAMOTO Y' OR AU='TAKAMOTO YOSHIFUMI':AU='TAKAMOTO YO-
            SHIFUMI CENTRAL RESEARCH LABORATORY'
S3          2   AU='TAKAMOTO YOSHIFUMI HITACHI LTD':AU='TAKAMOTO YOSHIFUMI
            INT PROP GP HITACHI LTD'
S4         40   AU='ODAWARA H' OR AU='ODAWARA HIROAKI':AU='ODAWARA HIROAKI
            HITACHI LTD'
S5          0   S1:S4 AND NETWORK? ?(2N)ATTACH?(2N)(DISK? ? OR DISC? ? OR -
            STORAGE)
```

```
File 347:JAPIO Oct 1976-2002/Jun(Updated 021004)
         (c) 2002 JPO & JAPIO
File 350:Derwent WPIX 1963-2002/UD,UM &UP=200271
         (c) 2002  Thomson Derwent

Set     Items   Description
S1    2666041   FUNCTION? ? OR COMMAND? ? OR QUERY OR QUERIE? ? OR REQUEST?
             ? OR TRANSACTION? ? OR TASK? ? OR JOB? ? OR OPERATION? ? OR -
            PROCEDURE? ? OR DIRECTIVE? ?
S2     281257   S1(5N)(NODE? ? OR HOST? ? OR PC? ? OR COMPUTER? ? OR CLIEN-
            T? ? OR PROCESSOR? ? OR TERMINAL? ? OR DEVICE? ?)
S3       1950   (SECURITY OR CONFIDENTI? OR USAGE)(3N)(LEVEL? OR GRADE OR -
            GRADES OR STANDING OR RANK? OR RATING OR CLASS??)
S4    2065061   AUTHORIZ? OR AUTHORIS? OR PERMISSION? ? OR PERMIT? OR CLEA-
            RANCE? ? OR APPROV? OR ALLOW? OR RIGHT? ? OR PRIVILEGE? ? OR -
            ACCESS??? OR AUTHENTICAT? OR VERIF? OR VALIDAT? OR CREDENTIAL?
             ? OR ROLE? ?
S5    2215489   DISK? ? OR DISC? ? OR DISKETTE?? OR CDROM?? OR CD OR CDS OR
             DVD??? OR MINIDISK? ? OR MINIDISC? ? OR DRIVE OR DRIVES OR S-
            TORAGE
S6     468173   (RECORDING OR RECORDABLE OR WRITING OR WRITABLE OR WRITEAB-
            LE OR REPRODUCING OR REPRODUCIBLE OR REPRODUCTION OR STORING -
            OR STORE? ?)(3N)(MEDIUM? ? OR MEDIA OR SURFACE OR UNIT? ? OR -
            PROCESSOR? ? OR DEVICE? ?)
S7     152754   SERVER? ? OR WEBSERVER? ? OR DATABASE? ? OR DATA()BASE? ?
S8     114630   S5:S7(10N)S3:S4
S9      86680   S1(5N)S5:S6
S10     21328   S1(5N)S7
S11       158   S2 AND S8 AND S9 AND S10
S12        54   S11 AND SERVER? ? AND CLIENT? ?
S13       104   S11 NOT S12
S14        46   S13 AND SERVER? ? AND IC=G06F
S15        58   S13 NOT S14
S16      2714   NETWORK? ?(2N)ATTACH?(2N)(DISK? ? OR DISC? ? OR STORAGE) OR
            OFFLOAD??? OR OFF()LOAD???
S17       571   S3:S4 AND S16
S18       177   S1 AND S17
S19        78   S18 AND S5:S6
S20        77   S19 NOT S11
S21       328   S1(5N)PROXY
S22       364   PROXY(10N)S3:S4
S23        26   S2 AND S21 AND S22 AND S10
S24        25   S23 NOT (S11 OR S20)
```

12/5/16 (Item 16 from file: 347)
DIALOG(R)File 347:JAPIO

06204786 **Image available**
STORAGE SHAPED DISTRIBUTED VIDEO **SERVER** SYSTEM

PUB. NO.: 11-146343 [JP 11146343 A]
PUBLISHED: May 28, 1999 (19990528)
INVENTOR(s): YAMASHITA AKIRA
APPLICANT(s): TOSHIBA CORP
APPL. NO.: 09-308630 [JP 97308630]
FILED: November 11, 1997 (19971111)
INTL CLASS: H04N-005/93; G06F-003/06; G06F-013/00; G06F-013/00; G11B-020/10; H04N-005/765; H04N-005/781; H04N-007/173

ABSTRACT

PROBLEM TO BE SOLVED: To simply realize arbitration and synchronization of **disk access** by each **server** that is required to share in common a storage device by pluralities of video **servers** .

SOLUTION: In this storage shared distributed video **server** system, a synchronization controller 13 repeats output of control signals S1-Sn in a prescribed order at a predetermined prescribed time interval to each of **servers** 11-1 to 11-n to individually **permit access** of the **servers** to common share **disk** devices 12-1 to 12-m. Upon the receipt of a video data distribution **request** from a **client** , the **server** 11-i (denoting any of the **servers** 1-n) accesses a **disk device storing** video data on **request** among the common share **disk devices** 12-1 to 12-m for only a prescribed time period in response to the synchronizing signal Si received by itself.

12/5/17 (Item 17 from file: 347)
DIALOG(R)File 347:JAPIO

06178588 **Image available**
METHOD FOR PROCESSING FILE BY USING INTERNET, DEVICE FOR REALIZING THE METHOD AND **STORAGE** MEDIUM RECORDED WITH **PROCEDURE** FOR REALIZING THE METHOD

PUB. NO.: 11-120137 [JP 11120137 A]
PUBLISHED: April 30, 1999 (19990430)
INVENTOR(s): MARUNO FUMIAKI
APPLICANT(s): RICOH CO LTD
APPL. NO.: 09-276917 [JP 97276917]
FILED: October 09, 1997 (19971009)
INTL CLASS: G06F-015/00; G06F-012/00; G06F-013/00

ABSTRACT

PROBLEM TO BE SOLVED: To **allow** a **server** to execute the processing only by designating a processing class through item selection on a screen from a general browser and an input without newly generating a special program and to return execution result to a **client** .

SOLUTION: A **server** 20 generates an initial screen by a **request** of a **client** 10 and returns it (22). When display/updation is selected on the initial screen that is shown by the **client** , the **server** returns a list of files to the **client** (24). When a file name and a processing class which are targets are inputted from the list of files, the file name, a specific external identifier and the processing class are automatically added to a URL and and sent. Screen information sent from the **server** has a **function** which adds an input/selection item to the URL. The **server** performs designated processing of a file that has the specific external identifier added to the URL(27), performs HTML conversion 28 and returns it

to the **client** .

12/5/19 (Item 19 from file: 347)
DIALOG(R)File 347:JAPIO

05476417 **Image available**
DISK SHARING DEVICE

PUB. NO.: 09-091217 [JP 9091217 A]
PUBLISHED: April 04, 1997 (19970404)
INVENTOR(s): GUNJI MICHIO
APPLICANT(s): OKI ELECTRIC IND CO LTD [000029] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 07-250279 [JP 95250279]
FILED: September 28, 1995 (19950928)
INTL CLASS: [6] G06F-013/00; G06F-013/00; G06F-012/00; G06F-013/10
JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units)

ABSTRACT

PROBLEM TO BE SOLVED: To share a disk by radio communication in a simple constitution by providing a transfer/reception means which transfers and receives the information by radio communication and a disk sharing driver.

SOLUTION: A disk sharing driver 13 of a computer 10 placed at the **client** side generates a **request command** and sends it to a communication device 14 to have an **access** to the **drive** of a **disk** 26 that is designated by the application software 12. A transfer part 14a of the **device** 14 sends the received **request command** and the transfer object information to the **server** side by radio communication. A reception part 24b of a communication device 24 of a computer 20 placed at the **server** side receives the **request command** and the object information and transfers them to a disk sharing driver 23. The driver 23 gives an instruction to a **disk** driver 25 based on the **request** command and has an **access** to the designated **drive** of the **disk** 26.

12/5/20 (Item 20 from file: 347)
DIALOG(R)File 347:JAPIO

05373435 **Image available**
INPUT/OUTPUT PROCESSING SYSTEM FOR NETWORK FILING SYSTEM

PUB. NO.: 08-328935 [JP 8328935 A]
PUBLISHED: December 13, 1996 (19961213)
INVENTOR(s): TOMITA HARUO
APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 07-131780 [JP 95131780]
FILED: May 30, 1995 (19950530)
INTL CLASS: [6] G06F-012/00; G06F-013/00; G06F-015/00
JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units); 45.4 (INFORMATION PROCESSING -- Computer Applications)

ABSTRACT

PURPOSE: To provide an input/output processing system capable of improving the throughput of an entire system by asynchronously processing write **requests** from **client computers** to a file.

CONSTITUTION: A **server** computer 1 is provided with a **storage device** 16 for holding remote **procedure** calls transmitted from **client computers** 2a-2n. When the received remote procedure call is the request of write to the file on an external **storage device** 15, this remote **procedure** call is held in the **storage** device 16, a response is

immediately returned to any one of **client computers** 2a-2n of a **request** source, and a file input/output **request** held in the **storage device** 16 is mapped at prescribed timing as the access request of the local filing system of this **server computer** 1. Thus, the write **requests** can be asynchronously processed as the local filing system without waiting the **client** computers 2a-2n.

12/5/21 (Item 21 from file: 347)
DIALOG(R)File 347:JAPIO

04159344 **Image available**
SYSTEM FOR IMPROVING DATA TRANSFER EFFICIENCY

PUB. NO.: 05-151044 [JP 5151044 A]
PUBLISHED: June 18, 1993 (19930618)
INVENTOR(s): MUGITANI TAKAO
SHINODA KAZUHIRO
APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP (Japan)
KOBE NIPPON DENKI SOFTWARE KK [000000] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 03-335992 [JP 91335992]
FILED: November 27, 1991 (19911127)
INTL CLASS: [5] G06F-012/00; G06F-013/00
JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units)
JOURNAL: Section: P, Section No. 1623, Vol. 17, No. 546, Pg. 35, September 30, 1993 (19930930)

ABSTRACT

PURPOSE: To improve the processing ability through the efficient data transfer between a **client** and a **server** in the **client / server** type database processing system.

CONSTITUTION: When an access **request** comes from a **client** -side user work program 1 to a **host** database 5, the requested database **operation command** is decoded by a **database operation command** analysis part 2-1 to be stored in a command management table 2-6 by a **database operation command storage** part 2-2 when the decoded command is not related to the physical **access** of the **host database** 5. When the decoded **command** is required for the **access** to the host **database** 5 as well as the **command** stored in the table, a **database operation command** connection part 2-3 connects the commands to be sent through a protocol generation part 2-4 and a **client** -side communication control part 2-5 to a **server** -side **database access** program 4.

12/5/22 (Item 22 from file: 347)
DIALOG(R)File 347:JAPIO

03812341 **Image available**
SYSTEM PROGRAM LOADING SYSTEM

PUB. NO.: 04-177441 [JP 4177441 A]
PUBLISHED: June 24, 1992 (19920624)
INVENTOR(s): TAKAGI TOSHINARI
APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 02-302885 [JP 90302885]
FILED: November 08, 1990 (19901108)
INTL CLASS: [5] G06F-013/00; G06F-009/445
JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units); 45.1 (INFORMATION PROCESSING -- Arithmetic Sequence Units)
JOURNAL: Section: P, Section No. 1435, Vol. 16, No. 493, Pg. 58, October 13, 1992 (19921013)

ABSTRACT

PURPOSE: To load the system programs to plural types of **client** computers with use of a single **server** computer by retrieving the corresponding system program based on a device type identification name and then transmitting and loading the retrieved system program.

CONSTITUTION: A **client** computer 1 is provided to produce a system program load **request** together with a **server computer** 2 which is connected to the computer 1 via a network and transmits a system program with a **request** , and a secondary **storage** medium 3 to which the computer 2 can have an **access** . Then a **request** means 11 provided to the **computer** 1 produces a system program load **request** together with its own **device** type identification name. A retrieving means 22 provided to the computer 2 retrieves the corresponding system program 23 out of the directory of the medium 3 with an input request. Then the program 23 is transmitted and loaded to the **client** computer 1 from the **server** computer 2.

12/5/37 (Item 15 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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013674681 **Image available**
WPI Acc No: 2001-158893/200116
XRPX Acc No: N01-115798

Storage server **for retrieving data from** disks **in response to user** access request , **has cross bar switch coupled to** server **modules to route data from** server **modules to** clients **requesting data**

Patent Assignee: DIVA SYSTEMS CORP (DIVA-N); ASHLEY W (ASHL-I); CHIN D (CHIN-I); LERMAN J S (LERM-I); TAYLOR C G (TAYL-I); ZACK S (ZACK-I)
Inventor: ASHLEY W; CHIN D; LERMAN J S; TAYLOR C G; ZACK S
Number of Countries: 090 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200058856	A1	20001005	WO 2000US8410	A	20000330	200116 B
AU 200040481	A	20001016	AU 200040481	A	20000330	200116
US 6289376	B1	20010911	US 99127116	A	19990331	200154
			US 99363670	A	19990729	
GB 2363229	A	20011212	WO 2000US8410	A	20000330	200205
			GB 200122686	A	20010920	
US 20010056480	A1	20011227	US 99127116	A	19990331	200206
			US 99363670	A	19990729	
			US 2001911591	A	20010724	

Priority Applications (No Type Date): US 99363670 A 19990729; US 99127116 P 19990331; US 2001911591 A 20010724
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200058856	A1	E	24	G06F-015/16	

Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

AU 200040481	A	G06F-015/16	Based on patent WO 200058856
US 6289376	B1	G06F-015/16	Provisional application US 99127116
GB 2363229	A	G06F-015/16	Based on patent WO 200058856
US 20010056480	A1	G06F-015/16	Provisional application US 99127116
			Cont of application US 99363670
			Cont of patent US 6289376

Abstract (Basic): WO 200058856 A1

NOVELTY - A cross bar switch (220) coupled to **server** modules (2081-208n) which accept data **request** from **clients** . Each **server** module issues data retrieval **command** to **storage devices** (2121-212n) coupled to each specific **server** module. The cross bar

switch performs the routing of packet data, e.g. Motion Picture Experts Group (MPEG) data, from the **server** modules to the **clients** requesting the data.

DETAILED DESCRIPTION - Each **server** module contains a processor and storage devices. Each storage device is exactly coupled to one specific **server** module. An INDEPENDENT CLAIM is also included for a method for providing data channel from data storage devices to user terminals.

USE - For retrieving data from **disks** in response to user **access request** .

ADVANTAGE - Outputs data at a correct time and with proper format for delivery to the users since data channels are formed connecting a user to a data source. Eliminates processor overhead or time wasted arbitrating for control on fiber channel loops, thus available bandwidth is efficiently used by keeping the disks constantly busy.

DESCRIPTION OF DRAWING(S) - The figure shows the detailed block diagram of the storage **server** .

Server modules (2081-208n)
Storage devices (2121-212n)
Cross bar switch (220)
pp; 24 DwgNo 2/6

Title Terms: STORAGE; SERVE; RETRIEVAL; DATA; DISC; RESPOND; USER; ACCESS; REQUEST; CROSS; BAR; SWITCH; COUPLE; SERVE; MODULE; ROUTE; DATA; SERVE; MODULE; **CLIENT** ; REQUEST; DATA
Derwent Class: T01; W01
International Patent Class (Main): G06F-015/16
International Patent Class (Additional): G06F-013/00
File Segment: EPI

12/5/38 (Item 16 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013662430 **Image available**
WPI Acc No: 2001-146642/200115
XRPX Acc No: N01-107347
Direct transaction access **provision method for** client device , **involves** storing **portion of received data from host system**
Patent Assignee: TRANSLINK SOFTWARE INC (TRAN-N)
Inventor: FLANAGAN J T; ROSENBERGER J L
Number of Countries: 093 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200062170	A1	20001019	WO 2000US9260	A	20000407	200115	B
AU 200042103	A	20001114	AU 200042103	A	20000407	200115	
US 6243737	B1	20010605	US 99289786	A	19990409	200133	
EP 1203295	A1	20020508	EP 2000921837	A	20000407	200238	
			WO 2000US9260	A	20000407		
KR 2002019011	A	20020309	KR 2001712867	A	20011009	200262	

Priority Applications (No Type Date): US 99289786 A 19990409
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200062170	A1	E	69	G06F-013/00	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

AU 200042103	A		G06F-013/00	Based on patent WO 200062170
US 6243737	B1		G06F-015/16	
EP 1203295	A1	E	G06F-013/00	Based on patent WO 200062170

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

KR 2002019011	A		G06F-017/30

Abstract (Basic): WO 200062170 A1

NOVELTY - A **client transaction** is mapped to **host transactions** output to **host** system (14) for processing. The data received from host system is stored in processing completed **host transactions** . Based on received data, the processing completion time of all **transactions** by **host** system, is determined. A portion of received data is stored in **client transaction** mapped to **host transaction** .

DETAILED DESCRIPTION - The **client transaction** comprises **client** output fields and **host transaction** comprises **host** input fields. The identifier of **host** input fields associates the **client transaction** with the mapped **host transaction** . INDEPENDENT CLAIMS are also included for the following:

(a) program product;

(b) **transaction server**

USE - For providing direct **transaction** access to data residing on **host** system, to **client** device such as web based **client** computer.

ADVANTAGE - Does not require additional software programing and testing on host system. Eliminates need for additional memory resources in host system. Offers access to many web based users without adversely impacting the host system.

DESCRIPTION OF DRAWING(S) - The figure shows the pictorial diagram of host system- **client** computer environment.

Host system (14)

pp; 69 DwgNo 1/21

Title Terms: DIRECT; TRANSACTION; ACCESS; PROVISION; METHOD; **CLIENT** ; DEVICE; STORAGE; PORTION; RECEIVE; DATA; HOST; SYSTEM

Derwent Class: T01; W01

International Patent Class (Main): G06F-013/00; G06F-015/16; G06F-017/30

International Patent Class (Additional): G06F-013/14

File Segment: EPI

12/5/40 (Item 18 from file: 350)

DIALOG(R)File 350:Derwent WPIX

013500030 **Image available**

WPI Acc No: 2000-671971/200065

XRPX Acc No: N00-498138

Processing of airline reservations for manipulating electronic airline data, involves permitting client **terminal to use airline reservation record stored in** storage **subsystem after input and appending process**

Patent Assignee: SABRE INC (SABR-N)

Inventor: MEHOVIC F

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6122642	A	20000919	US 96588463	A	19960118	200065	B

Priority Applications (No Type Date): US 96588463 A 19960118

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6122642	A		12	G06F-017/30	

Abstract (Basic): US 6122642 A

NOVELTY - The method involves inputting airline reservation records to a **transaction** processing **server computer** . A selected **database query** statement is appended to each airline reservation record. The airline reservation records are stored with the selected **database query** statement in a **storage** subsystem. A **client** terminal is **permitted** to use the stored airline reservation records.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for the airline reservation system.

USE - For propagating, retrieving and manipulating electronic airline data.

ADVANTAGE - Provides framework for propagating transaction processing facility-based computerized reservation system data to

relational database management system for subsequent retrieval and use in transparent manner by end user. Enables end user to **access** data after propagation to relational **database** management system using already known language structure software loaded for **operation** of **database server** .

DESCRIPTION OF DRAWING(S) - The figure is a schematic representation of communicably linked hardware components illustrating retrieval and use of propagated transaction processing facility data.

pp; 12 DwgNo 8/9

Title Terms: PROCESS; AIRLINE; RESERVE; MANIPULATE; ELECTRONIC; AIRLINE; DATA; PERMIT; **CLIENT** ; TERMINAL; AIRLINE; RESERVE; RECORD; STORAGE; STORAGE; SUBSYSTEM; AFTER; INPUT; PROCESS

Derwent Class: T01

International Patent Class (Main): G06F-017/30

File Segment: EPI

12/5/43 (Item 21 from file: 350)

DIALOG(R)File 350:Derwent WPIX

012892845 **Image available**

WPI Acc No: 2000-064680/200006

XRPX Acc No: N00-050736

Flat image delivery server **for managing image** requests **from at least one** client **and reducing load on web** server

Patent Assignee: HEWLETT-PACKARD CO (HEWP)

Inventor: HABU M

Number of Countries: 026 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 967556	A2	19991229	EP 99102527	A	19990210	200006	B
JP 2000092424	A	20000331	JP 99176608	A	19990623	200027	

Priority Applications (No Type Date): US 98105519 A 19980626

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 967556	A2	E	6	G06F-017/30	

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

JP 2000092424 A 5 H04N-005/78

Abstract (Basic): EP 967556 A2

NOVELTY - The image **server** (11) manages image **requests** from at least one **client** (15). The images are stored in a **storage server** (12). An image **request** is received (17) from one **client** , and the image is retrieved (16)from the storage **server** . The image is reformatted into an output image with a format reusable by the **client** . The output image is sent (17) to the **client** .

DETAILED DESCRIPTION - The flat image delivery **server** manages image conversions eg. The fetching of image tiles and the stitching of image tiles into JPEG images, and is apart from the web **server** (12). The image conversion of the flat image delivery **server** is invoked by a static URL request which **allows** the resulting JPEG image to be cached by proxy **servers** (14). The flat image delivery **server** operates in between a web **server** and a proxy **server** . The conversion **command** includes an image filename, a resolution size requirement, and the region of interest. INDEPENDENT CLAIMS are included for; a method for managing imaging image **requests** from at least one **client** .

USE - Flat image delivery **server** for managing image conversions, eg. Fetching of image titles and stitching of image titles in JPEG images.

ADVANTAGE - Flat image delivery **server** manages image conversions eg. Fetching of image tiles and stitching of image tiles into JPEG images. Reduces processing load on web **server** .

DESCRIPTION OF DRAWING(S) - The drawing shows the inventive flat image delivery **server** in its operating environment.

Internet system (10)

Flat image delivery **server** (11)
Web **server** (12)
IP **server** (13)
Proxy **server** (14)
Web **client** (15)
pp; 6 DwgNo 1/1
Title Terms: FLAT; IMAGE; DELIVER; SERVE; MANAGE; IMAGE; REQUEST; ONE; **CLIENT** ; REDUCE; LOAD; WEB; SERVE
Derwent Class: T01
International Patent Class (Main): G06F-017/30; H04N-005/78
International Patent Class (Additional): G06F-012/00; H04N-005/765
File Segment: EPI

12/5/47 (Item 25 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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012094456 **Image available**
WPI Acc No: 1998-511367/199844
XRPX Acc No: N98-399080
Computer network license management control system for electronic publication like newspaper and software - checks license information in server , based on content data request **from** client **after which data** access **permission is given to** client **terminal**
Patent Assignee: DAINIPPON PRINTING CO LTD (NIPQ); INUSYSTEM KK (INUS-N); IWANAMI SHOTEN KK (IWAN-N)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 10222427	A	19980821	JP 9726535	A	19970210	199844	B

Priority Applications (No Type Date): JP 9726535 A 19970210
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 10222427	A		12	G06F-012/14	

Abstract (Basic): JP 10222427 A
The system (1) comprises a **server** (2) to which multiple **client** terminals (9-1 - 9-n) are connected through a network (3). The content data (24) is stored in a CD-ROM (23) and license data (22) showing the user name and the utilisation period are stored in a floppy **disk** . When the **request** signal for **accessing** the content data is received from the **client** terminal, the license data is checked by the **server** , after which **access permission** is granted.
ADVANTAGE - Ensures data security for multiple users.
Dwg.1/6
Title Terms: COMPUTER; NETWORK; LICENCE; MANAGEMENT; CONTROL; SYSTEM; ELECTRONIC; PUBLICATION; NEWSPAPER; SOFTWARE; CHECK; LICENCE; INFORMATION ; SERVE; BASED; CONTENT; DATA; REQUEST; **CLIENT** ; AFTER; DATA; ACCESS; PERMIT; **CLIENT** ; TERMINAL
Derwent Class: T01
International Patent Class (Main): G06F-012/14
International Patent Class (Additional): G06F-001/00; G06F-015/00; G06F-017/60
File Segment: EPI

12/5/48 (Item 26 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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011965804 **Image available**
WPI Acc No: 1998-382714/199833
XRPX Acc No: N98-299523
Parallel data searching system in client server **network - receives multiple** request **signals from** clients **through search coordinator based on which documents are searched in database and stored in**

information storage unit
Patent Assignee: SHARP KK (SHAF)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 10154160	A	19980609	JP 97260301	A	19970925	199833	B

Priority Applications (No Type Date): JP 96252958 A 19960925
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 10154160	A		15	G06F-017/30	

Abstract (Basic): JP 10154160 A

The system makes use of several memories (20a-20c) in which divided database (21a-21c) are stored with a predetermined keyword. These memories are **accessed** by multiple **servers** (19a-19c) through a network (18). The **request** signal from a search **terminal** (11) for a particular document is received, from a **client** (12) through a search coordinator (13).

Based on the request signal, the document is searched in the divided database by the **servers** . The searched document information stored in an information **storage** unit (4) for multiple **request** signal **processors** . The document searching is carried out in parallel, which is then transmitted to the **client** through the search coordinator.

ADVANTAGE - Enables document searching process effectively. Simplifies document **database** maintenance **function** .

Dwg.1/10

Title Terms: PARALLEL; DATA; SEARCH; SYSTEM; **CLIENT** ; SERVE; NETWORK; RECEIVE; MULTIPLE; REQUEST; SIGNAL; **CLIENT** ; THROUGH; SEARCH; COORDINATE ; BASED; DOCUMENT; SEARCH; DATABASE; STORAGE; INFORMATION; STORAGE; UNIT
Derwent Class: T01
International Patent Class (Main): G06F-017/30
International Patent Class (Additional): G06F-015/16
File Segment: EPI

12/5/49 (Item 27 from file: 350)
DIALOG(R)File 350:Derwent WPIX

011956781 **Image available**
WPI Acc No: 1998-373691/199832
XRPX Acc No: N98-293336
Video editing system with client - server **architecture -** accesses **secondary** storage **device and video** data , based **on received data** access request
Patent Assignee: HITACHI LTD (HITA)
Inventor: ASAI M; HIROSE N; IWANAGA M; OHNO R; ONODERA T; TAKIYASU Y; YAMASHITA H
Number of Countries: 002 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 10150584	A	19980602	JP 96307720	A	19961119	199832	B
US 6014695	A	20000111	US 97971899	A	19971117	200010	
JP 3217002	B2	20011009	JP 96307720	A	19961119	200164	

Priority Applications (No Type Date): JP 96307720 A 19961119
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 10150584	A		14	H04N-005/222	
US 6014695	A			G06F-015/16	
JP 3217002	B2		14	H04N-005/222	Previous Publ. patent JP 10150584

Abstract (Basic): JP 10150584 A

The system includes a **server** (20)) and a **client** (100) which are connected through a network (300). The **client** has a video data processor which reads and displays video data. The **server** has a

secondary storage device (250) such as a magnetic **disk** unit coupled with the network. The **server** receives a data access **request** from the **client** and responds to the **request** from **client** by granting permission to access.

A network file system unit transmits the data access result from a data access unit to the network file access unit of the **client** . The data **access** unit receives the data **access request** from the **server** . The secondary **storage** device and the video data are **accessed** , based on the data access request.

ADVANTAGE - Improves video data forwarding efficiency.

Dwg.1/10

Title Terms: VIDEO; EDIT; SYSTEM; **CLIENT** ; SERVE; ARCHITECTURE; ACCESS; SECONDARY; STORAGE; DEVICE; VIDEO; DATA; BASED; RECEIVE; DATA; ACCESS; REQUEST
Derwent Class: T01; W02; W04
International Patent Class (Main): G06F-015/16; H04N-005/222
International Patent Class (Additional): H04N-005/765; H04N-005/781; H04N-007/173
File Segment: EPI

12/5/50 (Item 28 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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011935548 **Image available**
WPI Acc No: 1998-352458/199831
XRPX Acc No: N98-275584

Client - server **system in LAN - in which** server **is** accessed **by** clients **by converting image processing** request **to standard form which is then reconverted to image processing** request **at** server

Patent Assignee: RICOH KK (RICO)
Inventor: MORITA T
Number of Countries: 002 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 10133987	A	19980522	JP 96287920	A	19961030	199831	B
US 5928335	A	19990727	US 97959848	A	19971029	199936	

Priority Applications (No Type Date): JP 96287920 A 19961030
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 10133987	A		23	G06F-013/00	
US 5928335	A			G06F-013/00	

Abstract (Basic): JP 10133987 A

The system (1) has multiple **clients** connected to a **server** via a communication unit. When a **client** sends an image processing **request** to the **server** , a **request** input **unit stores** the **request** . The **request** is converted into a standard form.

The request transmitting unit sends the request which is received and converted into an image processing **request** . The **server** processes the image processing **request** .

ADVANTAGE - Enables **access** of image processor acting as **server** . Improves productivity and image quality.

Dwg.1/12

Title Terms: **CLIENT** ; SERVE; SYSTEM; LAN; SERVE; ACCESS; **CLIENT** ; CONVERT ; IMAGE; PROCESS; REQUEST; STANDARD; FORM; RECONVERSION; IMAGE; PROCESS; REQUEST; SERVE
Derwent Class: P75; T01; W02
International Patent Class (Main): G06F-013/00
International Patent Class (Additional): B41J-029/38; G06F-003/12; H04N-001/00; H04N-001/32; H04N-007/173
File Segment: EPI; EngPI

12/5/51 (Item 29 from file: 350)
DIALOG(R)File 350:Derwent WPIX

011612549 **Image available**
WPI Acc No: 1998-029677/199803
XRPX Acc No: N98-023917

Application software management system for client / server **architecture** - allows client **to** access **software on** server **based on** access rights **pertaining to** client **after checking** access rights **by security check program**

Patent Assignee: NEC CORP (NIDE)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 9288607	A	19971104	JP 96122249	A	19960419	199803	B

Priority Applications (No Type Date): JP 96122249 A 19960419
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 9288607	A		5	G06F-012/00	

Abstract (Basic): JP 9288607 A

The system comprises a software which is shared by **client** is installed on a **server** . The **client** makes a **request** to a **client** application **storage** area (11) based on which **access rights** of an application starting request part (13) is determined by a security check program (12).

Depending on the access rights granted, the files are accessed through a network (14) by the application starting request part.

ADVANTAGE - Improves security of application software by preventing unauthorised access.

Dwg.1/2

Title Terms: APPLY; SOFTWARE; MANAGEMENT; SYSTEM; **CLIENT** ; SERVE; ARCHITECTURE; ALLOW; **CLIENT** ; ACCESS; SOFTWARE; SERVE; BASED; ACCESS; PERTAIN; **CLIENT** ; AFTER; CHECK; ACCESS; SECURE; CHECK; PROGRAM
Derwent Class: T01
International Patent Class (Main): G06F-012/00
International Patent Class (Additional): G06F-013/00
File Segment: EPI

14/5/13 (Item 13 from file: 347)
DIALOG(R)File 347:JAPIO

05957491 **Image available**
METHOD FOR **COMPUTER** LOAD DECENTRALIZATION AT SQL **PROCEDURE** EXECUTION TIME

PUB. NO.: 10-240591 [JP 10240591 A]
PUBLISHED: September 11, 1998 (19980911)
INVENTOR(s): KODERA TAKASHI
KIMURA KOJI
KAMESHIRO MASAKO
APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 09-044999 [JP 9744999]
FILED: February 28, 1997 (19970228)
INTL CLASS: [6] **G06F-012/00** ; **G06F-017/30**
JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units); 45.4 (INFORMATION PROCESSING -- Computer Applications)

ABSTRACT

PROBLEM TO BE SOLVED: To decentralize the computer load placed on a **database server** when an SQL(structured **query** language) is executed.
SOLUTION: An SQL procedure definition statement 10 is analyzed and separated into an SQL data operation statement for data **operation** to a **database** and an SQL control statement for controlling the execution of the SQL data operation statement, a logic control procedure 18 in executable form including an SQL data operation statement call is generated from the SQL control statement and **stored** in a **storage device** , and a **database access procedure** 19 in executable form is generated from the SQL data **operation** statement and **stored** in the **storage device** . For the database, an application **server** is prepositioned and executes the logic control **procedure** 18 and executes the **database** access **procedure** 19 by a call of the **database access procedure** .

14/5/14 (Item 14 from file: 347)
DIALOG(R)File 347:JAPIO

05841252 **Image available**
METHOD FOR MANAGING FILE IN LIBRARY AND **SERVER** DEVICE FOR LIBRARY

PUB. NO.: 10-124352 [JP 10124352 A]
PUBLISHED: May 15, 1998 (19980515)
INVENTOR(s): YAMADA TAKAHIRO
YAMAGUCHI MASAFUMI
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 08-282137 [JP 96282137]
FILED: October 24, 1996 (19961024)
INTL CLASS: [6] **G06F-012/00**
JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units)
JAPIO KEYWORD:R102 (APPLIED ELECTRONICS -- Video Disk Recorders, VDR)

ABSTRACT

PROBLEM TO BE SOLVED: To provide a library **server** device which can deliver data containing moving picture data at **requests** from **terminals** for a network system which uses a library handling a **recording medium** , such as an optical **disk** , that is hardly **accessed** by more than one user because of its speed.

SOLUTION: A reproduction **request** management part 192 of the **server device** 19 records a **request** to reproduce a file from a **terminal device** and finds a **reproduction request** frequency, a file management part 193 generates a copy of the file on another disk or hard **disk** 20 according to the reproduction **request** frequency, and a readout control

part 194 reads data out of the original file or its copy and delivers the data.

14/5/15 (Item 15 from file: 347)
DIALOG(R)File 347:JAPIO

05720257 **Image available**
VIDEO **SERVER**

PUB. NO.: 10-003357 [JP 10003357 A]
PUBLISHED: January 06, 1998 (19980106)
INVENTOR(s): SUZUKI TAKEMOTO
TANAKA KIYOSHI
NISHIMURA KAZUTOSHI
SAKAMOTO HIDEKI
APPLICANT(s): NIPPON TELEGR & TELEPH CORP <NTT> [000422] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 08-157236 [JP 96157236]
FILED: June 18, 1996 (19960618)
INTL CLASS: [6] **G06F-003/06** ; **G06F-003/06** ; **G06F-013/00** ; H04N-005/93; H04N-007/16
JAPIO CLASS: 45.3 (INFORMATION PROCESSING -- Input Output Units); 44.6 (COMMUNICATION -- Television); 45.2 (INFORMATION PROCESSING -- Memory Units)

ABSTRACT
PROBLEM TO BE SOLVED: To provide a video **server** having the read scheduling system of bit stream without biasing **access** load when reading the bit stream in order or at timing different from ordinary reproduction.

SOLUTION: When the total sum of **access** load of I/O **commands** scheduled in a **storage device** corresponding to a read **request** exceeds quantity to be processed within unit time by storage devices 10 (10(sub 1)-10(sub n)), the I/O commands of which the priority is lower than the read request are taken out of the I/O **commands** scheduled in the **storage devices** 10 by a control processor 40 provided for the video **server** and in place of these **commands** , the I/O commands corresponding to the read **request** are scheduled into the desired **storage** devices 10.

14/5/16 (Item 16 from file: 347)
DIALOG(R)File 347:JAPIO

05690701 **Image available**
METHOD AND EQUIPMENT FOR COMMUNICATION

PUB. NO.: 09-305501 [JP 9305501 A]
PUBLISHED: November 28, 1997 (19971128)
INVENTOR(s): ISHII MEGUMI
APPLICANT(s): NIPPON TELEGR & TELEPH CORP <NTT> [000422] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 08-122069 [JP 96122069]
FILED: May 16, 1996 (19960516)
INTL CLASS: [6] **G06F-013/00** ; **G06F-012/00**
JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units)

ABSTRACT
PROBLEM TO BE SOLVED: To report the information of access to cached information even without adding a function, with which the difference between the acquisition request of information and the report is interpreted, to a **server** by discriminating an information **request** from an information **storage device** and the report of **access** at an information provider.
SOLUTION: When a user request is received and correspondent information is not stored, an information storage device 2300 stores the requested

information. Besides, the information acquired from an information provider 2200 is transmitted to an information request part and that acquired provided information is stored. When the information requested from a user is stored, that information is transferred to an information requesting device 2100 and the acquisition of information from the information provider 2200 is not processed by the inquiry of information request from the user is reported while using request information. Then, when the information request is received, the information provider 2200 stores the name of the requested information, retrieves the requested information from the stored information and transfers the retrieved result to the information storage device 2300

14/5/17 (Item 17 from file: 347)
DIALOG(R)File 347:JAPIO

04250269 **Image available**
DUPLEX COMPUTER SYSTEM

PUB. NO.: 05-241969 [JP 5241969 A]
PUBLISHED: September 21, 1993 (19930921)
INVENTOR(s): NINOMIYA TAKASHI
APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP (Japan)
TOSHIBA TSUSHIN SYST ENG KK [486765] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 04-041819 [JP 9241819]
FILED: February 28, 1992 (19920228)
INTL CLASS: [5] **G06F-012/16 ; G06F-003/06 ; G06F-015/16**
JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units); 42.5 (ELECTRONICS -- Equipment); 45.3 (INFORMATION PROCESSING -- Input Output Units); 45.4 (INFORMATION PROCESSING -- Computer Applications)
JOURNAL: Section: P, Section No. 1667, Vol. 17, No. 707, Pg. 147, December 24, 1993 (19931224)

ABSTRACT

PURPOSE: To provide a duplex computer system in which a computer is duplicated, and a magnetic disk device is also duplicated without using a specific device.

CONSTITUTION: The main **disk** access **server task** 11 of a main computer 1, when receiving the update **request** of data in the magnetic **disk device** 3 from a general **task** A or B, reports an update content to the backup **disk** access **server task** 21 of a backup **computer** 2 via a communication line 5 after updating the data in the magnetic **disk** device 3. The backup **disk access server task** 21 updates the data in the magnetic **disk** device 4 on the backup side according to an informed update content. Therefore, it is possible to duplicate storage data in the magnetic disk device 3 on the main computer 1 side and that in the magnetic disk device 4 on the backup computer 2 side.

14/5/18 (Item 18 from file: 347)
DIALOG(R)File 347:JAPIO

04116749 **Image available**
ACCESS CONTROLLER FOR DISTRIBUTED **DATABASE**

PUB. NO.: 05-108449 [JP 5108449 A]
PUBLISHED: April 30, 1993 (19930430)
INVENTOR(s): KODERA MAKOTO
APPLICANT(s): OKI ELECTRIC IND CO LTD [000029] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 03-296378 [JP 91296378]
FILED: October 16, 1991 (19911016)

INTL CLASS: [5] **G06F-012/00 ; G06F-015/40**
JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units); 45.4 (INFORMATION PROCESSING -- Computer Applications)
JOURNAL: Section: P, Section No. 1600, Vol. 17, No. 467, Pg. 44, August 25, 1993 (19930825)

ABSTRACT

PURPOSE: To improve the parallel degree of processings in a duplicate distributed database processor.

CONSTITUTION: In the duplicate distributed database processor 1 on a side requesting the processing, a reception state being the result of a processing request as against respective cursors is recorded in a cursor state **storage device** 19 on the **request** -side. A cursor state **processor** 12 breaks a processing result received based on the recorded reception state. Furthermore, a database **server** processor 71 on a side receiving the processing from the database processor on the side requesting the processing via a communication line records the processing state of the respective cursors in a cursor state storage device 17. A cursor state management device 15 interrupts a **database access** processing in the middle of the processing based on information on the recorded and processed state without a contradiction in a **database** and executes a new processing **request** .

14/5/20 (Item 20 from file: 347)

03727843 **Image available**
DISK **SERVER** FOR HIGH SPEED LAN

PUB. NO.: 04-092943 [JP 4092943 A]
PUBLISHED: March 25, 1992 (19920325)
INVENTOR(s): KOGA TAKAMASA
APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 02-206719 [JP 90206719]
FILED: August 06, 1990 (19900806)
INTL CLASS: [5] **G06F-013/00 ; G06F-012/08 ; G06F-015/16**
JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units); 45.4 (INFORMATION PROCESSING -- Computer Applications)
JAPIO KEYWORD: R012 (OPTICAL FIBERS); R131 (INFORMATION PROCESSING -- Microcomputers & Microprocessers)
JOURNAL: Section: P, Section No. 1385, Vol. 16, No. 319, Pg. 32, July 13, 1992 (19920713)

ABSTRACT

PURPOSE: To reduce cost by providing a means controlling a data **access** processing for mass storage disks and a **disk** buffer based on a **disk access request** from a **host computer** , which transmission/reception means receives.

CONSTITUTION: The **disk** control part 15 receiving the data **access** request from a work station (WS) and controlling data access with mass **storage** disks **Disc1 - Discn** in accordance with the **access request** is provided for the **disk server** 11 of high speed LAN. The disk data buffer 17 operating as the cache memory of the mass storage disks Disc1-Discn and nodes 1, 2... corresponding to respective WS1, WS2... are provided. Thus, a **computer** which **functions** as a **disk** -only **server** , whose data **access** can be speeded up and which has the same **function** as that of the **host computer** is not necessary to use. Thus, the cost of a LAN system can be realized.

14/5/22 (Item 2 from file: 350)

014677804 **Image available**
WPI Acc No: 2002-498861/200253
Related WPI Acc No: 2002-153859
XRPX Acc No: N02-394886

Data storage **method for multi-user** storage **system involves granting** access **to target data when host provides security key with prescribed relationship to security key associated with the target data**

Patent Assignee: KERN R F (KERN-I); SOVIK M A (SOVI-I); INT BUSINESS MACHINES CORP (IBMC)
Inventor: KERN R F; SOVIK M A
Number of Countries: 001 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20010052073	A1	20011213	US 9896962	A	19980612	200253	B
			US 2001825456	A	20010403		
US 6446209	B2	20020903	US 9896962	A	19980612	200260	
			US 2001825456	A	20010403		

Priority Applications (No Type Date): US 2001825456 A 20010403; US 9896962 A 19980612
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20010052073	A1		23	H04L-009/00	CIP of application US 9896962
US 6446209	B2			G06F-001/24	CIP of application US 9896962

Abstract (Basic): US 20010052073 A1

NOVELTY - A **storage** controller receives write **request** with target data and a security key from a host and stores the target data in digital data storage and the security key in metadata, in association with the target data. Access to the target data are granted to the host, when the host provides a security key with prescribed relationship to the stored security key.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) Data security method;
(2) Recorded medium storing data storage program;
(3) Data storage system;
(4) Storage controller; and
(5) Sound recordings distributing method.

USE - Used for multi-user **storage** system e.g. corporate intranet systems **accessed** by employee-users, telephone records accessible by telephone operator-users around the state, nation, or world, banking records accessed by remote customer-users operating ATM and engineering design specifications or models accessed by engineer-users working together on a technical project. Also used for limiting playback of sound recordings to users.

ADVANTAGE - Enables storage controller to be directly connected to a network without compromising security are having to had an intermediate **server** for performing security **functions** . Enables providing security to different **host** systems operated by different incompatible operating systems. The system is inexpensive as a network connected storage controller is used, eliminating the need for expensive **server** machine. The addition of a new host does not require security modification as the reference security keys are stored by the storage controller.

DESCRIPTION OF DRAWING(S) - The figure shows a flowchart for the controller operations performed to process a read request.

pp; 23 DwgNo 5/6

Title Terms: DATA; STORAGE; METHOD; MULTI; USER; STORAGE; SYSTEM; ACCESS; TARGET; DATA; HOST; SECURE; KEY; PRESCRIBED; RELATED; SECURE; KEY; ASSOCIATE; TARGET; DATA
Derwent Class: T01; W01
International Patent Class (Main): **G06F-001/24** ; H04L-009/00
File Segment: EPI

14/5/28 (Item 8 from file: 350)

DIALOG(R)File 350:Derwent WPIX
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014433510 **Image available**
WPI Acc No: 2002-254213/200230
XRPX Acc No: N02-196315
Shared access **provision method in multiprotocol network** CD **-ROM** server , **involves creating** tasks **for data packet received from** computers **requesting file access, and translating them into file access operations**
Patent Assignee: AXIS AB (AXIS-N)
Inventor: BANNURA P; GREN M; LINDGREN P; SANDSTROEM S
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6334148	B1	20011225	US 95576407	A	19951221	200230	B
			US 9890019	A	19980603		

Priority Applications (No Type Date): US 95576407 A 19951221; US 9890019 A 19980603
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6334148	B1		13	G06F-015/16	Cont of application US 95576407

Abstract (Basic): US 6334148 B1

NOVELTY - The transport protocol used in each data packet received from computers requesting file access, is identified. The tasks defined in selected application protocols corresponding to the identified protocol, are created for each data packet. The tasks are translated into file access operations and executed in response to the corresponding requests.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for multiprotocol network CD-ROM **server** .

USE - For providing computers connected to various networks, which share **access** to files from multiprotocol network **CD** -ROM **server** (claimed) where the CD-ROM disk stores different information such as software application, image collection illustrations, multimedia show, encyclopedia, etc.

ADVANTAGE - Since standard file sharing protocols such as **server** message block (SMB) and network file system (NFS) are used, there is no need for special software installation **disks** or tapes to **access** the **CD** -ROM **server** . Many **drives** can be simultaneously connected and **access** of users to any of them can also be restricted. Remote management and trouble-shooting of the **server** is also possible. The CD-ROM **server** works as a stand-alone device regardless of other file **servers** and their networks, thereby reducing network load and providing higher performance and reliability.

DESCRIPTION OF DRAWING(S) - The figure shows the front view of the CD-ROM **server** and internal CD-ROM drive.

pp; 13 DwgNo 5/8

Title Terms: SHARE; ACCESS; PROVISION; METHOD; NETWORK; CD; ROM; SERVE; TASK; DATA; PACKET; RECEIVE; COMPUTER; REQUEST; FILE; ACCESS; TRANSLATION ; FILE; ACCESS; OPERATE
Derwent Class: T01; T03; T04; U21
International Patent Class (Main): **G06F-015/16**
File Segment: EPI

14/5/32 (Item 12 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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013896540 **Image available**
WPI Acc No: 2001-380753/200140
XRPX Acc No: N01-279166
Disk dispensing system with automated quality control and Internet feedback, has kiosk with processor to receive request **for** disk **and billing information that is transmitted to another processor for billing confirmation for dispensing disk**

Patent Assignee: FREEFLYR LLC (FREE-N)
Inventor: BARBER W H; TOMASI P J
Number of Countries: 092 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200072160	A1	20001130	WO 2000US14398	A	20000525	200140	B
AU 200051626	A	20001212	AU 200051626	A	20000525	200140	

Priority Applications (No Type Date): US 99143601 P 19990713; US 99135854 P 19990525
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200072160	A1	E	71	G06F-013/00	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

AU 200051626	A		G06F-013/00	Based on patent WO 200072160

Abstract (Basic): WO 200072160 A1

NOVELTY - The system (100) has portable disk (200) which is connected by network (107) to system **server** . The **processor** in Kiosk receiver **request** for optical **disk** and billing information from user and transmits billing information to a central **server** . Based on the billing confirmation from **server** the optical **disk** is dispensed to user. Another processor in **server** performs credit **verification** corresponds to the billing information received and transmits electronic receipts to user specified address.

DETAILED DESCRIPTION - The processor is Kiosk displays the data from the specified optical disk. When the optical disk is returned by user it is identified by the processor when it transmits the identity to **server** and the preset signal is sent to **server** to specify any error in the disk. An INDEPENDENT CLAIM is also included for method for dispensing optical storage media.

USE - For providing automated retail distribution of recorded optical **disk** such as digital versatile **disk** by 24-hour **access** to online customer support.

ADVANTAGE - The system is simple and easy to use, and the title search process minimizes stopping time and allows rapid transactions, and also return of media is simple and hence the disk is restocked automatically. The standard design of the kiosk components minimizes manufacturing costs and simplifies maintenance. Standardized automated kiosk allow placement of the system kiosks in non-customary locations providing appropriate service to customer. Automated distribution and storage of recorded disks is done by a simple and inexpensive mechanic system. Since the consumer enters the e-mail address, receipts are given by e-mail and hence additional hard copy receipt printer is not required, thereby reducing the cost of kiosk and also transaction interaction with customer can be done online. The kiosk is designed with quick mount wall frame system, this provides maintenance of public use terminals allowing the keyed accessor to remove the system from the wall mount bracket for repair or replacement. This reduces maintenance costs by speeding installation and provides plug and play instant connectivity without the need for special tools, training or connections.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of disk distribution system.

Kiosk (101)
Server system (103)
Internet (104)
Network (107)
pp; 71 DwgNo 1/17

Title Terms: DISC; DISPENSE; SYSTEM; AUTOMATIC; QUALITY; CONTROL; FEEDBACK; KIOSK; PROCESSOR; RECEIVE; REQUEST; DISC; BILL; INFORMATION; TRANSMIT; PROCESSOR; BILL; CONFIRM; DISPENSE; DISC
Derwent Class: T01; T05; W02; W04

International Patent Class (Main): **G06F-013/00**
File Segment: EPI

14/5/33 (Item 13 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013871469 **Image available**
WPI Acc No: 2001-355681/200137
XRPX Acc No: N01-258409
Key information managing and unlocking supporting system to handle requests **of an affiliated** store device
Patent Assignee: KAWAI SHOKAI KK (KAWA-N)
Inventor: KAWAI M
Number of Countries: 021 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200137132	A1	20010525	WO 2000JP7927	A	20001110	200137	B
JP 2001140514	A	20010522	JP 99323432	A	19991112	200145	

Priority Applications (No Type Date): JP 99323432 A 19991112
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200137132	A1	J	41	G06F-017/30	

Designated States (National): US
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
JP 2001140514 A 14 E05B-019/20

Abstract (Basic): WO 200137132 A1
NOVELTY - In response to a **request** of an affiliated **store device** (200), a key information managing **server** (110) correlates key information necessary for unlocking with information specifying the user of the key and registers the key information in a key information database (120). When an affiliate **store device** (200) **requests** the key information managing **server** (110) to output the registered key information through a network (320), the **server** (110) searches the key information database (120) according to the information specifying the user and outputs the retrieved key information to the affiliated **store device** (200). The affiliated **store device** (200) **allows** a display (240) to display the key information. Thus the lock can be unlocked quickly at low cost without breaking it.
USE - Key information managing and unlocking supporting system to handle **requests** of an affiliated **store device**
DESCRIPTION OF DRAWING(S) - Affiliated store device (200)
Key information managing **server** (110)
Network (320)
Key information database (120)
Display (240)
pp; 41 DwgNo 1/14
Title Terms: KEY; INFORMATION; MANAGE; UNLOCK; SUPPORT; SYSTEM; HANDLE; REQUEST; STORAGE; DEVICE
Derwent Class: Q47; T01
International Patent Class (Main): E05B-019/20; **G06F-017/30**
International Patent Class (Additional): E05B-019/00; E05B-065/00; **G06F-017/60**
File Segment: EPI; EngPI
?
PLEASE ENTER A COMMAND OR BE LOGGED OFF IN 5 MINUTES
?t/5/39,40

14/5/39 (Item 19 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012352284 **Image available**
WPI Acc No: 1999-158391/199914

XRPX Acc No: N99-114994
File server **system - transmits reading request and write-in** request **of** terminals **to data** storage device **and** server **, respectively**
Patent Assignee: NIPPON TELEGRAPH & TELEPHONE CORP (NITE)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 11015721	A	19990122	JP 97168600	A	19970625	199914	B

Priority Applications (No Type Date): JP 97168600 A 19970625
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 11015721	A		6	G06F-012/00	

Abstract (Basic): JP 11015721 A
NOVELTY - The write-in request is transmitted along with data write-in **approval** instruction, when it is received by **server** (30). The other **terminal requests** are transmitted with data write-in injunction instruction. Based on the instructions, the storage device stores write-in data from **server** . DETAILED DESCRIPTION - **Requests** from **terminals** (20a,20b) are divided into file write-in and read request. The read **request** is transmitted to a **storage device** (40) for reading a file.
USE - None given.
ADVANTAGE - Accelerates reading of file from data storage device by reducing throughput of **server** . DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of file **server** system. (20a,20b) Terminal; (30) **Server** ; (40) Data storage device.
Dwg.2/5
Title Terms: FILE; SERVE; SYSTEM; TRANSMIT; READ; REQUEST; WRITING; REQUEST ; TERMINAL; DATA; STORAGE; DEVICE; SERVE; RESPECTIVE
Derwent Class: T01
International Patent Class (Main): **G06F-012/00**
International Patent Class (Additional): **G06F-013/00**
File Segment: EPI

14/5/40 (Item 20 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012114437 **Image available**
WPI Acc No: 1998-531349/199845
Related WPI Acc No: 1995-052274; 1995-131083
XRPX Acc No: N98-414627
Rapid recovery method from network file server **failure - involves transferring responsibility to respond to file** server requests **responded earlier from failed** computer **system to additional computer system**
Patent Assignee: VINCA CORP (VINC-N)
Inventor: MARSDEN W; OHRAN M R; OHRAN R S; ROLLINS R N
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5812748	A	19980922	US 9381391	A	19930623	199845	B
			US 9394755	A	19930720		
			US 95442415	A	19950516		

Priority Applications (No Type Date): US 95442415 A 19950516; US 9381391 A 19930623; US 9394755 A 19930720
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5812748	A		24	G06F-011/00	CIP of application US 9381391
					CIP of application US 9394755

Abstract (Basic): US 5812748 A
The method involves running a mass **storage access** program on an additional computer system using mirroring data received from each of

several computer systems via communicating unit and writing it in additional mass storage system. A mass storage emulator is installed on each computer system. The mass **storage** emulator receives mass storage write **requests** from file **server** operating system and sends mirroring data indicating write **request** to additional **computer** system via communication unit.

The mirroring of data is initiated by writing data both to mass **storage** device of computer system and through mass **storage** emulator and **access** program, in additional mass **storage** system thus making a portion of additional mass storage device appear to be an extra mass storage device. When a failure is detected in any of the computer systems, the responsibility to respond to file **server** **requests** responded earlier is transferred to the additional computer system. The mirror data is continuously sent from unfailed computer system to additional computer system so that the additional computer system responds to both file **server** **requests** and mirror data.

ADVANTAGE - Provides tolerance to disk faults even if computer of **server** computer system fails. Eliminates need for time consuming information copying from non-failing **server** to previously failed **server** to make them consistent and **permit** mirroring of information.

Dwg.8,10/1

0

Title Terms: RAPID; RECOVER; METHOD; NETWORK; FILE; SERVE; FAIL; TRANSFER; RESPOND; FILE; SERVE; REQUEST; RESPOND; EARLY; FAIL; COMPUTER; SYSTEM; ADD; COMPUTER; SYSTEM

Derwent Class: T01

International Patent Class (Main): **G06F-011/00**

File Segment: EPI

15/5/9 (Item 9 from file: 347)
DIALOG(R)File 347:JAPIO
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06007124 **Image available**
AUTHENTICATION SYSTEM FOR AUTHENTICATING ELECTRONIC INFORMATION AND ITS METHOD

PUB. NO.: 10-290224 [JP 10290224 A]
PUBLISHED: October 27, 1998 (19981027)
INVENTOR(s): KOMURA MASAHIRO
ONO KOSHIO
KURODA YASUTSUGU
TORII SATORU
APPLICANT(s): FUJITSU LTD [000522] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 10-011859 [JP 9811859]
FILED: January 23, 1998 (19980123)
INTL CLASS: [6] H04L-009/32; G09C-001/00
JAPIO CLASS: 44.3 (COMMUNICATION -- Telegraphy); 44.9 (COMMUNICATION -- Other)
JAPIO KEYWORD: R102 (APPLIED ELECTRONICS -- Video Disk Recorders, VDR); R131 (INFORMATION PROCESSING -- Microcomputers & Microprocessers); R138 (APPLIED ELECTRONICS -- Vertical Magnetic & Photomagnetic Recording); R303

ABSTRACT

PROBLEM TO BE SOLVED: To prevent illegal electronic transaction by authenticating whether or not a person handling a document in an enterprise has a right.

SOLUTION: A value generating section 26 of a **server** 11 generates a proper value for **authentication** and sends it to a terminal 12 of a person in charge 1. The **terminal** 12 applies a given **function** to the value to generate a function value and it is added to a document and circulates it to persons in charge 2, 3. **Terminals** 13, 14 similarly applies a **function** to the value and the three application results of the 3 **functions** are sent to the **server** 11 with the document. A secret information comparison section 28 compares the received function value with a **function** value in a secret information **storage** device 30 and when they are equal, a document transmission section 22 adds an electronic signature of a representative to the document and transmits the document to outside of the enterprise.

15/5/11 (Item 11 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2002 JPO & JAPIO. All rts. reserv.

04475484 **Image available**
DATA BASE

PUB. NO.: 06-119384 [JP 6119384 A]
PUBLISHED: April 28, 1994 (19940428)
INVENTOR(s): TAKAHASHI ISAO
APPLICANT(s): NEC SOFTWARE LTD [491061] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 04-271532 [JP 92271532]
FILED: October 09, 1992 (19921009)
INTL CLASS: [5] G06F-015/40; G06F-012/00
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications); 45.2 (INFORMATION PROCESSING -- Memory Units)
JOURNAL: Section: P, Section No. 1779, Vol. 18, No. 409, Pg. 63, July 29, 1994 (19940729)

ABSTRACT

PURPOSE: To provide a data base in which the response time of a data update terminal is short and efficiency is improved.

CONSTITUTION: This data base 1 is constituted of a data storage file 2 which stores data as it is without processing it, a retrieving data base 3 which stores the information of an item to be used usually for retrieval and address information for **accessing** the data **storage** file 2, a data update processing function 5 which receives a data update **request** from the data update **terminal** 4, and updates the data in the data storage file 2, and transmits the result of update processing, a retrieving **data base** update processing **function** 7 which receives a retrieving **data base** update **request** sent from the data update processing function 5, and updates the data in the retrieving data base 3, and informs a system state monitoring terminal 6 to monitor the state of a system of the result of the update processing, and a retrieving **data base** generating **function** 8 which generates the data in the retrieving data base 3 from the data in the data **storage** file 2 apart from the **request** from the data update **terminal** 4.

15/5/12 (Item 12 from file: 347)

03747140 **Image available**
DATA BASE PROCESSING **DEVICE** AND PROCESSING **PROCEDURE** GENERATING METHOD

PUB. NO.: 04-112240 [JP 4112240 A]
PUBLISHED: April 14, 1992 (19920414)
INVENTOR(s): HAYASHI KATSUMI
SAITO KAZUHIKO
OSATO HIROSHI
MITANI MASAAKI
HAYASHI TOMOHIRO
OBATA KOJI
SEKINE YUTAKA
URA MITSUHIRO
ISHII TAKUJI
APPLICANT(s): FUJITSU LTD [000522] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 02-231446 [JP 90231446]
FILED: August 31, 1990 (19900831)
INTL CLASS: [5] G06F-012/00
JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- Memory Units)
JOURNAL: Section: P, Section No. 1397, Vol. 16, No. 365, Pg. 9, August 06, 1992 (19920806)

ABSTRACT

PURPOSE: To generate **data base** processing **procedures** using an optimum **storage** structure according with the **access** characteristic of a **data base** by generating various **storage** structures from combination of a small number of fundamental data organizations.

CONSTITUTION: **Access** parts to a **storage** structure are dynamically assembled by an optimization processing part 11 at the time of conversion to **data base** processing **procedures** 16. This assembling method is patterned by record relations between fundamental data organizations constituting the storage structure such as pointer coupling from records of a specific fundamental data organization to records of another fundamental data organization and the classification of **operation** to the **storage** structure such as **access** based on the key value or key sequential access. it is sufficient if access parts related to combination of fundamental data organizations are taken as the object to add a new storage structure. Thus, it is unnecessary to take the combination result as the object, and trouble to add the storage structure is reduced.

15/5/13 (Item 13 from file: 347)

03125264 **Image available**
ACCESS SYSTEM FOR RELATIONAL **DATA BASE**

PUB. NO.: 02-100764 [JP 2100764 A]
PUBLISHED: April 12, 1990 (19900412)
INVENTOR(s): ITO KAZUO
APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 63-254165 [JP 88254165]
FILED: October 07, 1988 (19881007)
INTL CLASS: [5] G06F-015/40; G06F-012/00
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications); 45.2 (INFORMATION PROCESSING -- Memory Units)
JOURNAL: Section: P, Section No. 1072, Vol. 14, No. 313, Pg. 77, July 05, 1990 (19900705)

ABSTRACT

PURPOSE: To reduce the load of a CPU by adding a relational **data** base **function** to a magnetic **disk device** itself and dividing this **data base function** into the CPU and the magnetic disk device (i.e., the magnetic disk device chiefly performs the data base process).

CONSTITUTION: A magnetic disk device 4 connected to a CPU 5 contains a magnetic disk 3 forming a relational data base and connected with a CPU 1 and a memory 2. When an input/output **request** is given to a **data base** monitor program 20 of the CPU 5 from a user application program 10, the program 20 turns the received request into an input/output request 40 which is given to a data base monitor program 30 of the device 4. The program 20 returns the process result 50 to the program 10. Thus the input/output request received from the program 10 is divided into the programs 20 and 30 and then attained.

15/5/14 (Item 14 from file: 347)
DIALOG(R)File 347:JAPIO

01011630 **Image available**
DATA PROCESSING SYSTEM WITH DATA BASE UTILIZED BY TERMINAL EQUIPMENT

PUB. NO.: 57-161930 [JP 57161930 A]
PUBLISHED: October 05, 1982 (19821005)
INVENTOR(s): HAYASHI KATSUMI
APPLICANT(s): FUJITSU LTD [000522] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 56-046654 [JP 8146654]
FILED: March 30, 1981 (19810330)
INTL CLASS: [3] G06F-007/22; G06F-013/00; G06F-015/40
JAPIO CLASS: 45.1 (INFORMATION PROCESSING -- Arithmetic Sequence Units); 45.2 (INFORMATION PROCESSING -- Memory Units); 45.4 (INFORMATION PROCESSING -- Computer Applications)
JOURNAL: Section: P, Section No. 166, Vol. 07, No. 2, Pg. 45, January 07, 1983 (19830107)

ABSTRACT

PURPOSE: To report a position, up to which commands are already processed, to the user when the system down is recovered, by writing the processing state due to commands of each user in a mail box storage part.

CONSTITUTION: When a **command** is issued from a **terminal** equipment 5-0, a CPU1 fetches desired data into a main **storage device** by the **function** of a **data base access** control part 6 and uses this data to execute the processing corresponding to the command. Meanwhile, the CPU records data in a logging file 4 before and/or after this processing. A mail box storage part 7 which has processing mode information storage areas 8i in accordance with terminal equipments 5i is prepared to report a position, up to which commands are executed correctly when the system down occurs, to

each user for recovery of the system, and the main box storage part 7 is utilized in accodance with individual commands.

15/5/26 (Item 12 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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013697115 **Image available**
WPI Acc No: 2001-181339/200118
XRPX Acc No: N01-129279
Central directory services function offloading method involves accessing CDS database in accordance with LDAP protocol to enable communication between LDAP interface and CDS database
Patent Assignee: CISCO TECHNOLOGY INC (CISC-N)
Inventor: CHEN A; LEUNG P P; LYU M
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6154743	A	20001128	US 9897957	A	19980616	200118	B

Priority Applications (No Type Date): US 9897957 A 19980616
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6154743	A		11	G06F-017/30	

Abstract (Basic): US 6154743 A

NOVELTY - A node of advanced peer-to-peer networking (APPN) network is modified with a light-weight directory **access** protocol (LDAP) interface (450). The **database** (410) is organized to provide central directory services (CDS) functionality on transmission control protocol/internet protocol (TCP/IP) network. In response to **request** from another **node** of APPN network, **CDS database** is **accessed** in accordance with LDAP protocol to enable communication between the LDAP interface and CDS database.

DETAILED DESCRIPTION - At least one network node is designated as proxy **CDS** interface that provides **access** to **CDS database** on behalf of all nodes of the APPN network. CDS database is a LDAP accessible directory services. An INDEPENDENT CLAIM is also included for system to offload **CDS function** from mainframe of APPN network.

USE - For offloading **CDS function** from main frame of APPN network to database residing on dissimilar network, local area network, wide area network.

ADVANTAGE - Improves the efficiency of bandwidth usage and throughput in the APPN network because of the reduction of unnecessary broadcast searches in the network. Offloading of CDS services from APPN mainframe improves execution of efficiency of mission critical applications by obviating main frame performance degradation due to CDS searches. Just one network node need be configured with the proxy CDS feature, thus reduces the overall impact on an existing APPN network.

DESCRIPTION OF DRAWING(S) - The figure shows the schematic block diagram of software architecture of modified APPN network node.

Database (410)
Interface (450)
pp; 11 DwgNo 4/6

Title Terms: CENTRAL; DIRECTORY; SERVICE; FUNCTION; METHOD; ACCESS; DATABASE; ACCORD; PROTOCOL; ENABLE; COMMUNICATE; INTERFACE; DATABASE
Derwent Class: T01; W01
International Patent Class (Main): G06F-017/30
File Segment: EPI

15/5/28 (Item 14 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2002 Thomson Derwent. All rts. reserv.

013479421 **Image available**
WPI Acc No: 2000-651364/200063

XRPX Acc No: N00-483043
Network based database **system has** processor **for generating** commands **based on analysis of operational** request , **and table operational** request processor **further processes data for** storage
Patent Assignee: HITACHI SOFTWARE ENG CO LTD (HISF)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 2000267909	A	20000929	JP 9974775	A	19990319	200063	B

Priority Applications (No Type Date): JP 9974775 A 19990319
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2000267909	A		13	G06F-012/00	

Abstract (Basic): JP 2000267909 A
NOVELTY - Operational **requests** on network **database** (5) are analyzed and accordingly **database** operational **request processor** (3) generates requisite **commands** and develops table for storing data output. Table operational **request processor** (4) processes data as per analyzed results. **Database** is **accessed** from input-output **device** (1) through operational **request** receiver (2).
USE - Network based database system.
ADVANTAGE - Improves efficiency of **database operations** such as reference and updating.
DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of database system.
Input-output device (1)
Operational request receiver (2)
Database operational **request processor** (3)
Table operational **request processor** (4)
Network database (5)
pp; 13 DwgNo 1/17
Title Terms: NETWORK; BASED; DATABASE; SYSTEM; PROCESSOR; GENERATE; COMMAND ; BASED; ANALYSE; OPERATE; REQUEST; TABLE; OPERATE; REQUEST; PROCESSOR; PROCESS; DATA; STORAGE
Derwent Class: T01
International Patent Class (Main): G06F-012/00
International Patent Class (Additional): G06F-017/30
File Segment: EPI

15/5/35 (Item 21 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012584786 **Image available**
WPI Acc No: 1999-390893/199933
XRPX Acc No: N99-293286
Search message protocol conversion gateway system for database management - selects database access drive **unique to search** database **from** access drive **list file and forms search response according to rule of search message protocol transmitted to client program**
Patent Assignee: HITACHI LTD (HITA); HITACHI SEIBU SOFTWARE KK (HITA-N)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 11154158	A	19990608	JP 97320784	A	19971121	199933	B

Priority Applications (No Type Date): JP 97320784 A 19971121
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 11154158	A		14	G06F-017/30	

Abstract (Basic): JP 11154158 A
NOVELTY - Based on contents of search **request** from **client** program (1), **database access drive** (8) using **access** interface specific to searched **database** , is called from **access drive** list

file (9) and the **database** (4) is searched. Using the searched result, response formation system (10) forms search response according to the rule of search message protocol, that is transmitted to client program. DETAILED DESCRIPTION - When several **database** files have to be searched, several **database access drives** are used. Search results of several **database** files are collected and merged by the search result merging system. The search demand coded according to the search message protocol from the client program is decoded to analyzable message which is analyzed by the demand analysis system to read the content of the search demand.

USE - For database management.

ADVANTAGE - Since according to the search **request database access drive** unique to the **database** is selected from the **access drive** list and search **operation** is carried out, several **database** files are **accessed** in a simple effective manner. DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of search message protocol conversion gateway system. (1) Client program; (4) **Database** ; (9) **Access drive** list file; (10) Response formation system.

Dwg.1/9

Title Terms: SEARCH; MESSAGE; PROTOCOL; CONVERT; GATEWAY; SYSTEM; DATABASE; MANAGEMENT; SELECT; DATABASE; ACCESS; DRIVE; UNIQUE; SEARCH; DATABASE; ACCESS; DRIVE; LIST; FILE; FORM; SEARCH; RESPOND; ACCORD; RULE; SEARCH; MESSAGE; PROTOCOL; TRANSMIT; CLIENT; PROGRAM

Derwent Class: T01; W01

International Patent Class (Main): G06F-017/30

International Patent Class (Additional): G06F-012/00; H04L-012/28; H04L-012/46

File Segment: EPI

15/5/37 (Item 23 from file: 350)

DIALOG(R)File 350:Derwent WPIX

012457673 **Image available**

WPI Acc No: 1999-263781/199922

XRPX Acc No: N99-196484

Managing security in database system

Patent Assignee: SOFTLINE INC (SOFT-N)

Inventor: PACHAURI K

Number of Countries: 081 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9917209	A1	19990408	WO 98US20014	A	19980925	199922	B
AU 9895794	A	19990423	AU 9895794	A	19980925	199935	
US 6005571	A	19991221	US 97940845	A	19970930	200006	

Priority Applications (No Type Date): US 97940845 A 19970930; US 97940495 A 19970930

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9917209	A1	E	48	G06F-012/14	

Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

AU 9895794	A	G06F-012/14	Based on patent WO 9917209
US 6005571	A	G06F-003/00	

Abstract (Basic): WO 9917209 A1

NOVELTY - A graphical user interface (GUI) (200) is coupled to modules performing various security functions. A module (210) is used to design a security profile for a database system user, a module (220) implements the profile, a module (230) **validates** that the profile is properly implemented on a **database** , a module (240) tests the **database** security, a module (250) **allows** a security administrator to

determine what user performs specified **functions** on the **database** and a module (260) carries out day to day troubleshooting

DETAILED DESCRIPTION - Independent claims are included for methods of producing user security profile and user **function role** , for a **computer** -readable **storage** medium of computer instructions and for a GUI

USE - Modularizing security profiles for users of enterprise resource planning system including a database

ADVANTAGE - **Allowing** business manager to effectively visualize and manipulate **database** security without extensive training

DESCRIPTION OF DRAWING(S) - The figure is a block diagram illustrating some major functional components of security system according to one embodiment of present invention

GUI (200)

Security profile design module (220)

Troubleshooting module (260)

pp; 48 DwgNo 2/14

Title Terms: MANAGE; SECURE; DATABASE; SYSTEM
Derwent Class: T01
International Patent Class (Main): G06F-003/00; G06F-012/14
International Patent Class (Additional): G06F-017/30
File Segment: EPI

15/5/43 (Item 29 from file: 350)

DIALOG(R)File 350:Derwent WPIX

011074645 **Image available**
WPI Acc No: 1997-052569/199705
Related WPI Acc No: 1998-261698; 1999-539787; 2002-224137
XRPX Acc No: N97-043062

Video clip storage and retrieval system for Internet - includes multimedia terminal allowing **user to receive comprehensive data collected from one or more** databases **on user** request

Patent Assignee: INTERVU INC (INTE-N)
Inventor: GRUBER H; KENNER B
Number of Countries: 072 Number of Patents: 006
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9641285	A1	19961219	WO 96US10403	A	19960607	199705	B
AU 9661139	A	19961230	AU 9661139	A	19960607	199716	
EP 834143	A1	19980408	EP 96918500	A	19960607	199818	
			WO 96US10403	A	19960607		
JP 11507456	W	19990629	WO 96US10403	A	19960607	199936	
			JP 97502289	A	19960607		
AU 716842	B	20000309	AU 9661139	A	19960607	200022	
US 6181867	B1	20010130	US 95486517	A	19950607	200108	

Priority Applications (No Type Date): US 95486517 A 19950607
Cited Patents: 3.Jnl.Ref; EP 649121; EP 651554
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9641285	A1	E	81	G06F-017/30	
Designated States (National): AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN					
Designated States (Regional): AT BE CH DE DK EA ES FI FR GB GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG					
AU 9661139	A				Based on patent WO 9641285
EP 834143	A1	E			Based on patent WO 9641285
Designated States (Regional): AT BE CH DE FR GB IT LI					
JP 11507456	W		90	G06F-017/30	Based on patent WO 9641285
AU 716842	B			G06F-017/30	Previous Publ. patent AU 9661139
					Based on patent WO 9641285
US 6181867	B1			H04N-005/76	

Abstract (Basic): WO 9641285 A

The system includes a multimedia **terminal** through which a user

may **request** video clips from a **database** . The multimedia terminal is also able to receive and display requested video clips. A local storage and retrieval module communicates with the multimedia terminal and receives and processes video clip requests. A primary index manager communicates with the local storage and retrieval module. The index manager receives and processes video clip **requests** from the local **storage** and retrieval module.

The system further includes an extended storage and retrieval module which communicates with the primary index manager. The extended storage stores several data bases including a data base containing video clips. A data sequencing interface controlled by the primary index manager directs the extended storage and retrieval module to download the requested video clips. Finally a device downloads the requested clips to the multimedia terminal via the local storage and retrieval module.

ADVANTAGE - Maximises network capacity and minimizes delays.

Dwg.1/4

Title Terms: VIDEO; CLIP; STORAGE; RETRIEVAL; SYSTEM; TERMINAL; ALLOW; USER ; RECEIVE; COMPREHENSIVE; DATA; COLLECT; ONE; MORE; USER; REQUEST
Derwent Class: T01
International Patent Class (Main): G06F-017/30; H04N-005/76
International Patent Class (Additional): H04N-007/173
File Segment: EPI

15/5/49 (Item 35 from file: 350)

010264602 **Image available**
WPI Acc No: 1995-165857/199522
XRPX Acc No: N95-130372

Recording and reproducing method for radio broadcasting - incorporating validity check of received request **by referring to** data base **followed by information exchange between exchange and audio** storage device **followed by** recording operation

Patent Assignee: NEC CORP (NIDE)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 7087199	A	19950331	JP 93248584	A	19930910	199522	B

Priority Applications (No Type Date): JP 93248584 A 19930910
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 7087199	A		7	H04M-003/42	

Abstract (Basic): JP 7087199 A

The method includes a telephone apparatus (1). A special number dialled on the telephone apparatus is received by a first exchange (2). After verifying the availability of radio broadcast service, a special number is demanded from the telephone apparatus. After receiving the number, a **data base** is referred as a key. The **data base validates** the calling member. Special information is transmitted to the second exchange.

Upon receiving the special information a second exchange (3) verifies whether it is the radio broadcast recording demand. If it is so, then it is notified to audio storage device with a radio broadcast receiving circuit (4) corresponding to the above referred number. The radio broadcast frequency and recording time receive from the member are directed to the audio storage device with a radio broadcasting receiving circuit (4). The recording started at the designated time.

ADVANTAGE - Provides remote recording facility.

Dwg.1/6

Title Terms: RECORD; REPRODUCE; METHOD; RADIO; BROADCAST; INCORPORATE; VALID; CHECK; RECEIVE; REQUEST; REFER; DATA; BASE; FOLLOW; INFORMATION; EXCHANGE; EXCHANGE; AUDIO; STORAGE; DEVICE; FOLLOW; RECORD; OPERATE
Derwent Class: W01; W02

International Patent Class (Main): H04M-003/42
File Segment: EPI

15/5/55 **(Item 41 from file: 350)**
DIALOG(R)File 350:Derwent WPIX

008622834 **Image available**
WPI Acc No: 1991-126864/199118
XRPX Acc No: N91-097635
Object oriented database management process system - processes time consuming queries **using data** storage device **with data processor and** database **manager to process** query
Patent Assignee: IBM CORP (IBMC); INT BUSINESS MACHINES CORP (IBMC)
Inventor: ABRAHAM R L
Number of Countries: 004 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 425413	A	19910502	EP 90480134	A	19900904	199118	B
US 5161223	A	19921103	US 89425829	A	19891023	199247	
EP 425413	A3	19930421	EP 90480134	A	19900904	199401	

Priority Applications (No Type Date): US 89425829 A 19891023
Cited Patents: NoSR.Pub; 2.Jnl.Ref
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 425413	A				
	Designated States (Regional): DE FR GB				
US 5161223	A		15	G06F-015/40	

Abstract (Basic): EP 425413 A
The process uses a data storage device that stores a database of data objects; a data processor and an object oriented database manager. The process includes the steps of obtaining search criteria for **query** from **database** manager and determining if it is to be performed in background mode. If in this mode, it creates a stream that comprises an object with multiple stream attributes including a list of data objects which result from the query.
It creates a resumable batch query object that comprises resumable batch query attributes and at least one resumable batch query method. The attributes include an identifier for the stream. The query is performed in background mode and the resumable batch query object is placed as an incoming message indicator after the query is activated.
USE - Object oriented database management system. (17pp Dwg.No.7/9
Title Terms: OBJECT; ORIENT; DATABASE; MANAGEMENT; PROCESS; SYSTEM; PROCESS ; TIME; CONSUME; QUERY; DATA; STORAGE; DEVICE; DATA; PROCESSOR; DATABASE; MANAGE; PROCESS; QUERY
Derwent Class: T01
International Patent Class (Main): G06F-015/40
File Segment: EPI

20/5/16 (Item 14 from file: 350)
DIALOG(R)File 350:Derwent WPIX

014094959
WPI Acc No: 2001-579173/200165
XRPX Acc No: N01-431045
Task off - loading **method for distributed computer systems wherein tasks are shared to other servers to even server loads**
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: BENDERT E J; BENNETT R B; JOHNSON E; NUGENT R M
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6275867	B1	20010814	US 95527148	A	19950912	200165	B

Priority Applications (No Type Date): US 95527148 A 19950912
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6275867	B1		24	G06F-009/54	

Abstract (Basic): US 6275867 B1
NOVELTY - During execution of an application, the **operation** or **task** is considered by a client environment router which compares the **operation** with a list of those suitable for **off loading** . The **operation** is then routed to a designated **task** server and object modifications updated through server to server **operations** . Other system **tasks** such as pipe handing and file locking can also be **off loaded** .
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for the computer system and computer program using the **task off loading** method.
USE - To **allow** application load balancing within a distributed computer system by spreading **tasks** among the servers.
ADVANTAGE - The **task off - load** process is completely transparent to the user and has no effect on the file or object **storage** locations, the administration process on the owner server handles the **offload** , and tracks the **task** location and progress.
pp; 24 DwgNo 0/8
Title Terms: **TASK** ; LOAD; METHOD; DISTRIBUTE; COMPUTER; SYSTEM; **TASK** ; SHARE; SERVE; EVEN; SERVE; LOAD
Derwent Class: T01; W01
International Patent Class (Main): G06F-009/54
File Segment: EPI

20/5/23 (Item 21 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013376931 **Image available**
WPI Acc No: 2000-548869/200050
XRPX Acc No: N00-406074
Service performing method in multimedia network, retrieves data associated with request stored **in proxy** device , **from requesting devices, if requesting devices are on-line**
Patent Assignee: SONY ELECTRONICS INC (SONY); SONY CORP (SONY)
Inventor: BLASGEN M W; LUDTKE H A
Number of Countries: 090 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200045561	A2	20000803	WO 2000US1976	A	20000128	200050	B
AU 200034737	A	20000818	AU 200034737	A	20000128	200057	
US 6434596	B1	20020813	US 99239819	A	19990129	200255	

Priority Applications (No Type Date): US 99239819 A 19990129
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes

WO 200045561 A2 E 24 H04L-029/00
Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
AU 200034737 A H04L-029/00 Based on patent WO 200045561
US 6434596 B1 G06F-015/16

Abstract (Basic): WO 200045561 A2

NOVELTY - A proxy device (130) receives **request** from requesting devices (1101-100n) via a serial interface (105) and stores the received **request** in a queue. The device data associated with the stored **request** is retrieved from the requesting devices by the proxy device, if the requesting devices are on-line.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(a) service performing system;

(b) computer readable medium

USE - In multimedia network e.g. audio/video (AV) network connecting video camcorders, electronic still camera, personal computers, digital audio and video equipment, digital video cameras, printer, digital video monitors, audio actuators and video actuators.

ADVANTAGE - The requesting devices can transparently **offload requests** and the associated data to proxy device when a servicing device is off-line, thereby **allowing** the requesting devices to perform other **tasks** . Requesting devices can establish a number of **requests** without requiring expensive memory and **storage** resources. Requesting devices and other **devices** that **store** the data associated with **requests** can temporarily go off-line without disrupting the ability of servicing devices to perform associated services, and these devices do not have to store the data for a significant period of time, thereby making their limited **storage** and memory resources available for other **tasks** . Users can remove or disconnect from AV network, a requesting device after the requesting device sends a **request** to a servicing device but before the servicing device retrieves the associated data from the proxy device.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of multimedia network.

Serial interface (105)

Requesting devices (1101-100n)

Proxy device (130)

pp; 24 DwgNo 1/5

Title Terms: SERVICE; PERFORMANCE; METHOD; NETWORK; RETRIEVAL; DATA; ASSOCIATE; **REQUEST** ; **STORAGE** ; DEVICE; **REQUEST** ; DEVICE; **REQUEST** ; DEVICE; LINE
Derwent Class: W01
International Patent Class (Main): G06F-015/16; H04L-029/00
File Segment: EPI

20/5/30 (Item 28 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012008566
WPI Acc No: 1998-425476/199836
XRPX Acc No: N98-332196
Enhanced RAID 5 error recovery for hard disc drive **errors - utilises enhanced capability on** drive **to** off load **some recovery steps to** drive
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
RD 411088	A	19980710	RD 98411088	A	19980620	199836	B

Priority Applications (No Type Date): RD 98411088 A 19980620
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
RD 411088	A		3	G11B-000/00	

Abstract (Basic): RD 411088 A

The enhanced **drive** with auto re-assignment is such that when a read error occurs at the same time as RAID is reconstructing the data, the **drive** is either re-assigning or has completed re-assignment of the defective sector. A new write **command** will be performed to the new location, and when a read of the new location is issued, it will complete successfully, with the reassign and subsequent write **commands off loaded** from the RAID.

When RAID uses a write and **verify command** , the auto re-assignment is such that when an error occurs during the **verify function** , then the **drive** re-assigns the defective sector to a new location, still in the buffer **drive** or cache, which can be immediately written to the new location.

ADVANTAGE - Time saving and reduced error handling complexity.

Dwg.0/0

Title Terms: ENHANCE; RAID; ERROR; RECOVER; HARD; **DISC** ; **DRIVE** ; ERROR; UTILISE; ENHANCE; CAPABLE; **DRIVE** ; LOAD; RECOVER; STEP; **DRIVE**
Derwent Class: T03
International Patent Class (Main): G11B-000/00
File Segment: EPI

20/5/43 (Item 41 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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010383638 **Image available**
WPI Acc No: 1995-284952/199538
XRPX Acc No: N95-216958
Computing system for parallel processing of data - has co-executors which respond to requests **from processors for executing** off loaded functions
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC); IBM CORP (IBMC)
Inventor: BAUM R I; BRENT G A; GHAFIR H M; IYER B R; NARANG I S; RAO G S; SCALZI C A; SHARMA S P; SINHA B; WILSON L H
Number of Countries: 006 Number of Patents: 006
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 668560	A2	19950823	EP 95100549	A	19950117	199538	B
CA 2137488	A	19950819	CA 2137488	A	19941207	199545	
JP 7239783	A	19950912	JP 94313714	A	19941216	199545	
EP 668560	A3	19961106	EP 95100549	A	19950117	199651	
US 5655146	A	19970805	US 94199041	A	19940218	199737	
			US 95474925	A	19950607		
			US 96680069	A	19960712		
CA 2137488	C	19980929	CA 2137488	A	19941207	199849	

Priority Applications (No Type Date): US 94199041 A 19940218; US 95474925 A 19950607; US 96680069 A 19960712
Cited Patents: No-SR.Pub; 3.Jnl.Ref; EP 521486
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 668560	A2	E	38	G06F-009/46	
Designated States (Regional): DE FR GB					
JP 7239783	A		31	G06F-009/38	
US 5655146	A		32	G06F-013/12	Cont of application US 94199041
					Cont of application US 95474925
CA 2137488	A			G06F-009/28	
EP 668560	A3			G06F-009/46	
CA 2137488	C			G06F-009/28	

Abstract (Basic): EP 668560 A

The computing system includes several central processors in a central electronic complex sharing a central electronic **storage** . The

processors execute a host control programme. Several coexecutors are constructed in a different computer architecture. These perform **off loaded** work requested by the host programme.

A **command** device in each processor **requests** a coexecutor to execute the **off loaded** work. A code module is stored in the central **storage** module. Coexecutor **storage accesses** are constrained in both internal and central **storage** . The coexecutor signals completion of processing a **request** to the processor. The processor can then signal a new **off load request** .

ADVANTAGE - Improved operational integrity and data security. Reduced processing costs due to use of coexecutors.

Dwg.1/19

Title Terms: COMPUTATION; SYSTEM; PARALLEL; PROCESS; DATA; CO; RESPOND; **REQUEST** ; PROCESSOR; EXECUTE; LOAD; **FUNCTION**
Derwent Class: T01
International Patent Class (Main): G06F-009/28; G06F-009/38; G06F-009/46; G06F-013/12
International Patent Class (Additional): G06F-012/10; G06F-015/16
File Segment: EPI

20/5/51 (Item 49 from file: 350)
DIALOG(R)File 350:Derwent WPIX

008764385 **Image available**
WPI Acc No: 1991-268398/199137
XRPX Acc No: N91-204998

Peripheral sub-system for bulk memory - uses automatic peripheral controller to off load **central processor in handling multiple bulk** storage **devices**

Patent Assignee: BULL SA (SELA)
Inventor: CARTEAU D; GLACOMINI P; SCHRECK P; GIACOMINI P
Number of Countries: 006 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 445479	A	19910911	EP 90403617	A	19901214	199137	B
FR 2659460	A	19910913				199147	
US 5325488	A	19940628	US 91662567	A	19910228	199425	
EP 445479	B1	19950726	EP 90403617	A	19901214	199534	
DE 69021192	E	19950831	DE 621192	A	19901214	199540	
			EP 90403617	A	19901214		

Priority Applications (No Type Date): FR 902962 A 19900308
Cited Patents: 1.Jnl.Ref; DE 3801547; EP 287301; EP 29394; US 4747047; EP 29394; EP 297301
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 445479	A				
Designated States (Regional): DE FR GB IT NL					
US 5325488	A		21	G06F-012/00	
EP 445479	B1	F	28	G06F-003/06	
Designated States (Regional): DE FR GB IT NL					
DE 69021192	E			G06F-003/06	Based on patent EP 445479

Abstract (Basic): EP 445479 A

The memory sub-system (PSS1, PSS2) is part of a computer system having one or more central hosts (H1-H4), and has two control units (UC1, UC2) operating on bulk memory (BMD1, BMD2...). The sub-system has independent supplies from mains (ALIM) and a battery (BAT), and is connected to one of two parallel computer buses (B1, B2).

The sub-system architecture is such that its micro-code executes **commands** from the host, preventing the host changing the state of the bulk memory.

USE/ADVANTAGE - Decentralised control of bulk **storage allowing** greater choice and mixing of bulk **storage** devices without loading host. (26pp Dwg.No.2/8)

Title Terms: PERIPHERAL; SUB; SYSTEM; BULK; MEMORY; AUTOMATIC; PERIPHERAL;

CONTROL; LOAD; CENTRAL; PROCESSOR; HANDLE; MULTIPLE; BULK; **STORAGE** ; DEVICE
Derwent Class: T01
International Patent Class (Main): G06F-012/00
International Patent Class (Additional): G06F-003/06; G06F-013/12
File Segment: EPI

20/5/53 (Item 51 from file: 350)
DIALOG(R)File 350:Derwent WPIX

008630575 **Image available**
WPI Acc No: 1991-134605/199119
XRPX Acc No: N91-103411
Bus master command **protocol - building number of information control packets specifying number of** functions **be performed by** disk **array subsystem**
Patent Assignee: COMPAQ COMPUTER CORP (COPQ)
Inventor: FLOWER D L; GRANT D L; NEUFELD D E; SCHMENK D S; SCHULTZ S M; FLOWR D L; NEUFELD E D
Number of Countries: 007 Number of Patents: 006
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 426184	A	19910508	EP 90120981	A	19901102	199119	B
CA 2029199	A	19910504				199128	
US 5249279	A	19930928	US 89431737	A	19891103	199340	
EP 426184	A3	19930728	EP 90120981	A	19901102	199507	
EP 426184	B1	19970604	EP 90120981	A	19901102	199727	
DE 69030861	E	19970710	DE 630861	A	19901102	199733	
			EP 90120981	A	19901102		

Priority Applications (No Type Date): US 89431737 A 19891103
Cited Patents: NoSR.Pub; EP 266586; EP 294287; US 4583194
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 426184	A				
Designated States (Regional): DE FR GB IT NL					
US 5249279	A		51	G06F-007/22	
EP 426184	B1	E	60	G06F-003/06	
Designated States (Regional): DE FR GB IT NL					
DE 69030861	E			G06F-003/06	Based on patent EP 426184

Abstract (Basic): EP 426184 A
The bus master interface **command** protocol has an intelligent mass **storage disc** array subsystem, including a bus master and microprocessor controller. The **command** protocol **permits** the computer system to issue **disc** array **commands** to the controller at a logical level without having to issue **disc** specific **commands** . The **disc** array subsystem microprocessor controller reads the logical **commands** , translates the **commands** into smaller **disc** specific **commands** , and queues the **disc** specific **commands** for processing.
Upon completion of the logical **command** , the bus master controller asserts control over the computer system bus and manages the transfer of data to or from the computer system memory. The management of the **disc** array subsystem and the transfer of data is effectively **off - loaded** from the system processor **permitting** more efficient use of the processor. USE - Computer system. (494pp Dwg.No. 1/27)
Title Terms: BUS; MASTER; **COMMAND** ; PROTOCOL; BUILD; NUMBER; INFORMATION; CONTROL; PACKET; SPECIFIED; NUMBER; **FUNCTION** ; PERFORMANCE; **DISC** ; ARRAY; SUBSYSTEM
Derwent Class: T01
International Patent Class (Main): G06F-003/06; G06F-007/22
International Patent Class (Additional): G06F-013/00
File Segment: EPI

24/5/2 (Item 2 from file: 347)
DIALOG(R)File 347:JAPIO

06915232 **Image available**
CLIENT SERVER SYSTEM, SERVER, CLIENT, **PROXY SERVER** CONTROL METHOD, **PROXY** SERVER **FUNCTION** PROVIDING METHOD AND PROGRAM TRANSMITTING **DEVICE**

PUB. NO.: 2001-142768 [JP 2001142768 A]
PUBLISHED: May 25, 2001 (20010525)
INVENTOR(s): SOTANI TOSHIO
AOKI YOSHINORI
APPLICANT(s): INTERNATL BUSINESS MACH CORP (IBM)
APPL. NO.: 11-318628 [JP 99318628]
FILED: November 09, 1999 (19991109)
INTL CLASS: G06F-012/00; G06F-013/00

ABSTRACT

PROBLEM TO BE SOLVED: To easily and freely change-over a **Proxy server function** and to use it by rapidly permitting the **Proxy server function** to be usable by a simple operation.

SOLUTION: A system is provided with a WWW server 40 for executing a server process, a server 10 for providing the **Proxy** server **function** and a **client** 20 which is connected to a communication network 30 and performs access to the WWW server 40 and the server 10. The server 10 stares a web file 11 which is displayed as a web page by using a web browser, operated by reading by the web browser and provided with the **Proxy** server **function** . The **client** 20 incorporates the web browser for displaying the web page based on the web file 11 which is down-loaded from the server 10 via the communication network 30, reads the web file 11 in the web browser and, then, starts the **Proxy server function** arranged in the web file 11.

24/5/3 (Item 3 from file: 347)
DIALOG(R)File 347:JAPIO

06755495 **Image available**
INFORMATION TRANSFER METHOD AND RECORDING MEDIUM RECORDING INFORMATION TRANSFER PROGRAM

PUB. NO.: 2000-341361 [JP 2000341361 A]
PUBLISHED: December 08, 2000 (20001208)
INVENTOR(s): KAGEI TAKAHIRO
APPLICANT(s): NIPPON TELEGR & TELEPH CORP (NTT)
APPL. NO.: 11-149726 [JP 99149726]
FILED: May 28, 1999 (19990528)
INTL CLASS: H04L-029/08; G06F-013/00

ABSTRACT

PROBLEM TO BE SOLVED: To decrease the connection time of an accessed channel and to reduce a resident time of information in a proxy computer.

SOLUTION: A **client computer** C generates a reference **request** list in which a reference request to information of one item or over is described and sets up an **access** channel A, transmits the list to a proxy computer P, and interrupts the access channel A. The proxy **computer** P transmits a **proxy** reference **request** to **server computers** S1, S2, S3 storing all reference request object information sets described in the list, receives the reference request object information, sets up the access channel A, transmits the reference **request** object information to the **client computer** C and interrupts the access channel A.

24/5/4 (Item 4 from file: 347)
DIALOG(R)File 347:JAPIO

06745083 **Image available**
INTRANET SYSTEM AND METHOD FOR CONTROLLING SERVER

PUB. NO.: 2000-330937 [JP 2000330937 A]
PUBLISHED: November 30, 2000 (20001130)
INVENTOR(s): SHINKAWA TARO
APPLICANT(s): YASKAWA ELECTRIC CORP
APPL. NO.: 11-136187 [JP 99136187]
FILED: May 17, 1999 (19990517)
INTL CLASS: G06F-015/00; G06F-013/00; G06F-017/30

ABSTRACT

PROBLEM TO BE SOLVED: To easily increase the scale of the intranet system and the capacity of contents while maintaining fast **access** to a representating server by providing **proxy** servers between the representating server and a terminal device and decentralizing authenticating and access control processes for users.

SOLUTION: When a request to browse desirable contents is sent to a proxy server 11 by using the terminal device 13 of a user 15, the **proxy server** 11 having received the **request** retrieves the user. Then it is judged whether authenitication and **access** control information on the user in already registered on the **proxy** server 11. When the user 15 always makes **requests** to browse contents through a **terminal** device 13 under the **proxy** server 11, the **authentication** and **access** control information on the user 15 is stored in the **proxy** server 11, so it is speedily judged whether or not browsing is allowed; when browsing is allowed, the contents are immediately sent to the terminal device 13 of the user 15 from a representating server 10 and when not, it is immediately informed that the use is disallowed.

24/5/6 (Item 6 from file: 347)
DIALOG(R)File 347:JAPIO

06537215 **Image available**
COMMUNICATION CONTROL METHOD FOR APPLICATION GATEWAY

PUB. NO.: 2000-122939 [JP 2000122939 A]
PUBLISHED: April 28, 2000 (20000428)
INVENTOR(s): TOMOTA MASANORI
APPLICANT(s): TOSHIBA CORP
APPL. NO.: 10-289431 [JP 98289431]
FILED: October 12, 1998 (19981012)
INTL CLASS: G06F-013/00; H04L-012/66; H04L-029/06

ABSTRACT

PROBLEM TO BE SOLVED: To reduce the number of data copying times, to realize high speed communication between a client computer and a Web server computer and to reduce the load of a Web PROXY server computer in a communication control system for application gateway.

SOLUTION: The Web **PROXY server function** part of a Web **PROXY server** computer 100 **permits access** to a Web server computer 200 and a communication repeating part 110 repeats data communication between the Web browser **function** part 308 of the client **computer** 300 and the Web **server function** part 208 of the Web **server** computer 200 without passing through a Web PROXY server.

24/5/15 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX

014293259 **Image available**
WPI Acc No: 2002-113961/200215
Related WPI Acc No: 2001-432759
XRPX Acc No: N02-085018
Computer system for corporate business transaction , **has** proxy server **to forward message from client to destination server through gateway, when valid authentication algorithm is judged**
Patent Assignee: GTE SERVICE CORP (SYLV)
Inventor: GRANTGES D R
Number of Countries: 094 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200145049	A1	20010621	WO 2000US33816	A	20001214	200215	B
US 6324648	B1	20011127	US 99170686	P	19991214	200215	
			US 99471901	A	19991223		
AU 200120965	A	20010625	AU 200120965	A	20001214	200215	

Priority Applications (No Type Date): US 99471901 A 19991223; US 99170686 P 19991214
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200145049	A1	E	40	G06T-011/30	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

US 6324648	B1	H02H-003/05	Provisional application US 99170686
AU 200120965	A	G06T-011/30	Based on patent WO 200145049

Abstract (Basic): WO 200145049 A1
NOVELTY - A **proxy** server is allocated to insecure network (26) and **authorization** server (46) is allocated to private network for authenticating a user of client computer, based on user ID and password. Web server (28) on network (26), passes user ID to **authorization** server, to generate **authentication** algorithm. **Proxy** server passes message from client to destination server (20) through gateway (38), when authentication algorithm is valid.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for access providing method.
USE - For accessing Internet in corporate business transaction.
ADVANTAGE - User of remote client computer is authenticated correctly, thereby reduces hacker intrusion.
DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of computer system.
Servers (20,28,46)
Network (26)
Gateway (38)
pp; 40 DwgNo 1/8
Title Terms: COMPUTER; SYSTEM; BUSINESS; TRANSACTION; SERVE; FORWARD; MESSAGE; CLIENT; DESTINATION; SERVE; THROUGH; GATEWAY; VALID; AUTHENTICITY; ALGORITHM; JUDGEMENT
Derwent Class: T01
International Patent Class (Main): G06T-011/30; H02H-003/05
International Patent Class (Additional): H04L-009/00
File Segment: EPI

24/5/19 (Item 10 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013870279 **Image available**
WPI Acc No: 2001-354491/200137
XRPX Acc No: N01-257564

Proxy **participation enabling in electronic commerce** transactions **on Internet, by** verifying **primary secure session to set other session between** client **and** proxy **to** request **it to act as conduit to primary server**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC); IBM UK LTD (IBMC)
Inventor: BELLWOOD T A; LITA C; RUTKOWSKI M F
Number of Countries: 094 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200103398	A2	20010111	WO 2000GB2469	A	20000628	200137	B
AU 200055541	A	20010122	AU 200055541	A	20000628	200137	
EP 1197052	A2	20020417	EP 2000940630	A	20000628	200233	
			WO 2000GB2469	A	20000628		
CZ 200104650	A3	20020515	WO 2000GB2469	A	20000628	200241	
			CZ 20014650	A	20000628		
KR 2002015056	A	20020227	KR 2001716433	A	20011221	200258	

Priority Applications (No Type Date): US 99343454 A 19990630
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200103398	A2	E	26	H04L-029/00	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

AU 200055541	A		H04L-029/00	Based on patent WO 200103398
EP 1197052	A2	E	H04L-029/00	Based on patent WO 200103398

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

CZ 200104650	A3		H04L-029/00	Based on patent WO 200103398
KR 2002015056	A		H04L-029/00	

Abstract (Basic): WO 200103398 A2

NOVELTY - A primary secure session is established between client (10) and **proxy** (15). On **verification** of session, another secured session is established requesting **proxy** to act as conduit to primary origin server (12). Client and origin server negotiates a session master secret, which is delivered by client to proxy using primary secure session. The proxy is then enabled to participate in secure communication.

DETAILED DESCRIPTION - In response to **client request** to the primary origin **server** , the proxy is requested to act as conduit to secondary origin server (17). The client and the secondary origin server negotiate a new session master secret which is delivered by the client to the proxy using primary secure session. INDEPENDENT CLAIMS are also included for the following:

(a) Cryptographic system;

(b) Proxy participation enabling program

USE - For providing secured network communication between client and origin **servers** , used to secure electronic commerce **transactions** over internet.

ADVANTAGE - The security protocol **allows** a **proxy** to participate in a secure session between client and set of origin servers without changing the attributes of the session. The method is also independent of the encryption strength or authentication techniques used. No attacker modifies the negotiated communication without being detected by the parties to the communication.

DESCRIPTION OF DRAWING(S) - The figure is simplified diagram of network security protocol.

Client (10)

Origin servers (12,17)

Proxy (15)
pp; 26 DwgNo 4/5
Title Terms: PARTICIPATING; ENABLE; ELECTRONIC; TRANSACTION; VERIFICATION; PRIMARY; SECURE; SESSION; SET; SESSION; CLIENT; REQUEST; ACT; CONDUIT; PRIMARY; SERVE
Derwent Class: T01; W01
International Patent Class (Main): H04L-029/00
File Segment: EPI

24/5/20 (Item 11 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013586271 **Image available**
WPI Acc No: 2001-070478/200108
XRPX Acc No: N01-053358

Client-server computer system includes proxy server for processing information on storage device according to program instructions

Patent Assignee: SUN MICROSYSTEMS INC (SUNM)
Inventor: DUBEY N
Number of Countries: 090 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200052574	A2	20000908	WO 2000US5115	A	20000229	200108	B
AU 200035059	A	20000921	AU 200035059	A	20000229	200108	
EP 1159679	A2	20011205	EP 2000913653	A	20000229	200203	
			WO 2000US5115	A	20000229		

Priority Applications (No Type Date): US 99259196 A 19990301
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200052574	A2	E	27	G06F-009/455	
AU 200035059	A			G06F-009/455	Based on patent WO 200052574
EP 1159679	A2	E		G06F-009/455	Based on patent WO 200052574

Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

Abstract (Basic): WO 200052574 A2

NOVELTY - A client computer connected to a communication link generates **request** to a **proxy server** for processing certain information on a storage device. The **proxy** server computer **accesses** the information on storage device and associates program instructions to information for processing the information and processes the information according to the program instruction.

DETAILED DESCRIPTION - The client computer includes a user interface module for allowing user to select information on the data storage device and specifies the type of processing for the information. A **request** is generated to the **proxy server** , which includes data identifying the information and the type of processing specified by the user. A proxy server computer includes an association module for selecting program instructions appropriate for processing the information and an access module for locating and accessing information on the storage device via communication line.

USE - For client-server processing by proxy.

ADVANTAGE - Since the **client computer requests** the **proxy server computer** selected by the user to process user selected information with the appropriate program instruction for the selected information at the proxy server computer, the utilization of user to the server computer to locate desired data file on a storage device is enabled.

DESCRIPTION OF DRAWING(S) - The figure shows flowchart of

processing steps by client computer and proxy server computer.
pp; 27 DwgNo 3/5
Title Terms: CLIENT; SERVE; COMPUTER; SYSTEM; SERVE; PROCESS; INFORMATION; STORAGE; DEVICE; ACCORD; PROGRAM; INSTRUCTION
Derwent Class: T01
International Patent Class (Main): G06F-009/455
File Segment: EPI

24/5/21 (Item 12 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013199589 **Image available**
WPI Acc No: 2000-371462/200032
XRPX Acc No: N00-278487
Application gateway communication control module used in client-server system, performs relay of data communication between client and server computer without intervention of web-proxy server
Patent Assignee: TOSHIBA KK (TOKE)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 2000122939	A	20000428	JP 98289431	A	19981012	200032	B

Priority Applications (No Type Date): JP 98289431 A 19981012
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2000122939	A		10	G06F-013/00	

Abstract (Basic): JP 2000122939 A
NOVELTY - The web- **proxy server** (100) receives the **client request** and performs **approval** of **access** of data from the server computer (200). A communication relay unit (110) performs relay of data communication between client computer (300) and the server computer (200) without intervention of the web-proxy server.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for application gateway communication control procedure.
USE - For use in client-server computer system.
ADVANTAGE - Since data communication is performed between client and server computer without intervention of the web-proxy server, the unloading of web-proxy server is reduced, and high speed communication is performed.
DESCRIPTION OF DRAWING(S) - The drawing shows schematic component block diagram of application gateway communication control module.
Web-proxy server (100)
Communication relay unit (110)
Server computer (200)
Client computer (300)
pp; 10 DwgNo 1/8
Title Terms: APPLY; GATEWAY; COMMUNICATE; CONTROL; MODULE; CLIENT; SERVE; SYSTEM; PERFORMANCE; RELAY; DATA; COMMUNICATE; CLIENT; SERVE; COMPUTER; INTERVENING; WEB; SERVE
Derwent Class: T01; W01
International Patent Class (Main): G06F-013/00
International Patent Class (Additional): H04L-012/66; H04L-029/06
File Segment: EPI

24/5/22 (Item 13 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012866213 **Image available**
WPI Acc No: 2000-038046/200003
XRPX Acc No: N00-028689
Information access controlling method by gateway clients to web sites through proxy cache server

Patent Assignee: NOVELL INC (NOVE-N)
Inventor: MUTHUMAVADI M; SHAPIRO M L; SUBRAMANIAM A
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5991810	A	19991123	US 97905150	A	19970801	200003	B

Priority Applications (No Type Date): US 97905150 A 19970801
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5991810	A		8	G06F-017/30	

Abstract (Basic): US 5991810 A

NOVELTY - The **request** estabilised at the **client** (32) for transformation of information, is modified at the gateway client (22) according to directory service user name hierarchy and transmitted to proxy cache server (50). The **proxy server** reads the **request** and determines the **access permission** based on preset **access** parameters. The **permitted** information are received from **proxy** server and transmitted to the client.

DETAILED DESCRIPTION - The transfer request is modified by appending a header formatted accessing to directory service user name hierarchy and the context of the client within **client** organizational structure. The transfer **request** is a hyper text transfer protocol request. An INDEPENDENT CLAIM is also included for the system for controlling **access** by clients to information stored in a **proxy** cache server linked with a remote site.

USE - Used to restrict users from **accessing** specified web sites by gateway clients through **proxy** cache server.

ADVANTAGE - The arrangement restricts **access** by unauthorized users to specified web information stored in the **proxy** cache server and prevents the proxy server from retrieving web site information through internet for such unauthorized users.

DESCRIPTION OF DRAWING(S) - The figure shows the network architecture level block diagram of a network including a **proxy** cache server in which **access** by users to the **proxy** server is regulated.

Gateway client (22)
Client (32)
Proxy cache server (50)
pp; 8 DwgNo 1/4

Title Terms: INFORMATION; ACCESS; CONTROL; METHOD; GATEWAY; CLIENT; WEB; SITE; THROUGH; CACHE; SERVE
Derwent Class: T01
International Patent Class (Main): G06F-017/30
International Patent Class (Additional): G06F-015/00
File Segment: EPI

File 348:EUROPEAN PATENTS 1978-2002/Oct W04
(c) 2002 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20021031,UT=20021024
(c) 2002 WIPO/Univentio

Set	Items	Description
S1	1693517	FUNCTION? ? OR COMMAND? ? OR QUERY OR QUERIE? ? OR REQUEST? ? OR TRANSACTION? ? OR TASK? ? OR JOB? ? OR OPERATION? ? OR - PROCEDURE? ? OR DIRECTIVE? ?
S2	202722	S1(5N)(NODE? ? OR HOST? ? OR PC? ? OR COMPUTER? ? OR CLIEN- T? ? OR PROCESSOR? ? OR TERMINAL? ? OR DEVICE? ?)
S3	7149	(SECURITY OR CONFIDENTI? OR USAGE)(3N)(LEVEL? OR GRADE OR - GRADES OR STANDING OR RANK? OR RATING OR CLASS??)
S4	1062193	AUTHORIZ? OR AUTHORIS? OR PERMISSION? ? OR PERMIT? OR CLEA- RANCE? ? OR APPROV? OR ALLOW? OR RIGHT? ? OR PRIVILEGE? ? OR - ACCESS??? OR AUTHENTICAT? OR VERIF? OR VALIDAT? OR CREDENTIAL? ? OR ROLE? ?
S5	569955	DISK? ? OR DISC? ? OR DISKETTE?? OR CDROM?? OR CD OR CDS OR DVD??? OR MINIDISK? ? OR MINIDISC? ? OR DRIVE OR DRIVES OR S- TORAGE OR PROXY
S6	111712	(RECORDING OR RECORDABLE OR WRITING OR WRITABLE OR WRITEAB- LE OR REPRODUCING OR REPRODUCIBLE OR REPRODUCTION OR STORING - OR STORE? ?)(3N)(MEDIUM? ? OR MEDIA OR SURFACE OR UNIT? ? OR - PROCESSOR? ? OR DEVICE? ?)
S7	128192	SERVER? ? OR WEBSERVER? ? OR DATABASE? ? OR DATA()BASE? ?
S8	85979	S3:S4(5N)S5:S7
S9	68255	S1(5N)S5:S6
S10	28968	S1(5N)S7
S11	586	S2(S)S8(S)S9(S)S10
S12	385	S11 AND IC=G06F
S13	124	S12/TI,AB,CM
S14	16912	S3:S4(5N)(SERVER? ? OR WEBSERVER? ?)
S15	339	S2(S)S9(S)S10(S)S14
S16	230	S15 AND IC=G06F
S17	67	S16/TI,AB,CM
S18	58	S13 NOT S17
S19	159	S16 NOT S17:S18
S20	62	S19 AND S5:S6/AB
S21	1313	NETWORK? ?(2N)ATTACH?(2N)(DISK? ? OR DISC? ? OR STORAGE) OR (OFFLOAD??? OR OFF()LOAD???)(5N)(PROCESS? OR WORK OR S1)
S22	558	S3:S4(S)S21
S23	169	S22(S)S5:S6
S24	66	S23(S)S7
S25	63	S24 NOT (S17:S18 OR S20)
S26	33	S21/AB AND S22
S27	25	S26 NOT (S17:S18 OR S20 OR S25)

17/5,K/2 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00893768
Apparatus and method for operating an aggregation of server computers using a dual-role proxy server computer
Verfahren und Vorrichtung zum Betrieb einer Aggregation von Serverrechnern mittels eines Doppelzweck-Proxy-Servers
Appareil et procede pour commander une aggregation des ordinateurs serveurs utilisant un serveur proxy a double fonction
PATENT ASSIGNEE:
SUN MICROSYSTEMS, INC., (1392730), 2550 Garcia Avenue, Mountain View, CA 94043, (US), (Applicant designated States: all)
INVENTOR:
Katiyar, Dinesh, 1943 Mount Vernon Court No. 308; Mountain View, California 94040, (US)
LEGAL REPRESENTATIVE:
Harris, Ian Richard et al (72231), D. Young & Co., 21 New Fetter Lane, London EC4A 1DA, (GB)
PATENT (CC, No, Kind, Date): EP 817043 A2 980107 (Basic)
EP 817043 A3 011121
APPLICATION (CC, No, Date): EP 97304645 970627;
PRIORITY (CC, No, Date): US 674402 960702
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: G06F-009/46

ABSTRACT EP 817043 A2
A client/server computer apparatus includes an aggregation of server computers connected to a transmission channel. The aggregation of **server** computers includes a dual- **role** proxy **server** computer, and a set of non-proxy server computers. A set of client computers is also connected to the transmission channel. The set of **client computers** generates remote **procedure** calls to objects that are stored on the aggregation of **server** computers. The remote procedure calls include non-client remote procedure calls to the dual- **role** proxy **server computer** and **client** remote **procedure** calls to the non- **proxy server** computers. The dual-role proxy **server computer** processes the **client** remote **procedure** calls only when the set of non-proxy server **computers** cannot process the client remote **procedure** calls. The processing of **client** remote **procedure** calls by the dual- **role proxy server** computer results in the passing of information so that the **client** remote **procedure** calls can obtain servicing from the non-proxy **server** computers. Thus, the dual- **role** proxy **server** computer operates as a front-end **server** for non- **client** remote **procedure** calls and an information agent for **client** remote **procedure** calls.
ABSTRACT WORD COUNT: 176
NOTE:
Figure number on first page: 0

LEGAL STATUS (Type, Pub Date, Kind, Text):
Search Report: 011121 A3 Separate publication of the search report
Application: 980107 A2 Published application (A1with Search Report ;A2without Search Report)
Examination: 020612 A2 Date of request for examination: 20020408
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9802	931
SPEC A	(English)	9802	3678
Total word count - document A			4609
Total word count - document B			0
Total word count - documents A + B			4609

...ABSTRACT A2
A client/server computer apparatus includes an aggregation of server computers connected to a transmission channel. The aggregation of **server** computers includes a dual- **role** proxy **server** computer, and a set of

non-proxy server computers. A set of client computers is also connected to the transmission channel. The set of **client computers** generates remote **procedure** calls to objects that are stored on the aggregation of **server** computers. The remote procedure calls include non-client remote procedure calls to the dual- **role** proxy **server computer** and **client** remote **procedure** calls to the non- **proxy server** computers. The dual-role proxy **server computer** processes the **client** remote **procedure** calls only when the set of non-proxy server **computers** cannot process the client remote **procedure** calls. The processing of **client** remote **procedure** calls by the dual- **role proxy server** computer results in the passing of information so that the **client** remote **procedure** calls can obtain servicing from the non-proxy **server** computers. Thus, the dual- **role** proxy **server** computer operates as a front-end **server** for non- **client** remote **procedure** calls and an information agent for **client** remote **procedure** calls.

...CLAIMS computers connected to said transmission channel, said plurality of client computers generating remote procedure calls to objects that are stored on said aggregation of server **computers** , said remote procedure calls including non-client remote procedure calls to said dual- **role** proxy **server computer** and **client** remote **procedure** calls to said non- **proxy server** computers, said dual-role proxy **server computer** processing said **client** remote **procedure** calls only when said plurality of non-proxy server **computers** cannot process said **client** remote **procedure** calls.

2. The apparatus of claim 1 wherein said plurality of non-proxy server computers include a primary server computer and a plurality of secondary...

...11. A method for processing remote procedure calls to objects stored on an aggregation of server computers, said method comprising the steps of:

directing non- **client** remote **procedure** calls to a dual- **role proxy server** computer of said aggregation of **server computers** ;

routing **client** remote **procedure** calls to non- **proxy server computers** of said aggregation of server computers; and

re-routing said client remote procedure calls to said dual-role proxy server computer only when said non...

17/5,K/3 (Item 3 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

00753439

Virtual shared disks with application-transparent recovery

Gemeinsam genutzte virtuelle Platten mit anwendungstransparenter Wiedergewinnung

Disques virtuels partages avec recuperation transparente pour l'application

PATENT ASSIGNEE:

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Smith, Stephen Edwin, 19 Hatfield Road, Mahopac, New York 10541, (US)

LEGAL REPRESENTATIVE:

Rach, Werner, Dr. (76871), IBM Deutschland Informationssysteme GmbH, Patentwesen und Urheberrecht, 70548 Stuttgart, (DE)

PATENT (CC, No, Kind, Date): EP 709779 A2 960501 (Basic)
EP 709779 A3 961016
EP 709779 B1 010530

APPLICATION (CC, No, Date): EP 95115752 951006;

PRIORITY (CC, No, Date): US 332157 941031
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: G06F-011/14; G06F-011/20
CITED REFERENCES (EP B):
IBM TECHNICAL DISCLOSURE BULLETIN, vol. 32, no. 2, July 1989, pages 378-380, XP000033461 "TAKEOVER SCHEME FOR CONTROL OF SHARED DISKS"
IBM TECHNICAL DISCLOSURE BULLETIN, vol. 32, no. 11, 1 April 1990, page 168/169 XP000097659 "DYNAMIC STORAGE SUBSYSTEM PATH SWITCHING"
IBM TECHNICAL DISCLOSURE BULLETIN, vol. 36, no. 6B, 1 June 1993, pages 375-377, XP000377422 "SHARED VIRTUAL DISK FOR A CLUSTER OF PROCESSORS WITH SEPARATE I/O DEVICES AND SHARED MEMORY";

ABSTRACT EP 709779 A3
A system and method for recovering from failures in the disk access path of a clustered computing system. Each node of the clustered computing system is provided with proxy software for handling physical **disk** access **requests** from applications executing on the **node** and for directing the **disk access requests** to an appropriate **server** to which the disk is physically attached. The proxy software on each node maintains state information for all pending **requests** originating from that **node** . In response to detection of a failure along the disk access path, the proxy software on all of the **nodes** directs all further **requests** for **disk** access to a secondary node physically attached to the same disk. (see image in original document)
ABSTRACT WORD COUNT: 138
NOTE:
Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):

Grant:	010530	B1 Granted patent
Examination:	20000329	A2 Date of dispatch of the first examination report: 20000214
Oppn None:	020522	B1 No opposition filed: 20020301
Application:	960501	A2 Published application (A1with Search Report ;A2without Search Report)
Change:	960925	A2 Obligatory supplementary classification (change)
Search Report:	961016	A3 Separate publication of the European or International search report
Examination:	961023	A2 Date of filing of request for examination: 960827

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB96	521
CLAIMS B	(English)	200122	469
CLAIMS B	(German)	200122	471
CLAIMS B	(French)	200122	530
SPEC A	(English)	EPAB96	2680
SPEC B	(English)	200122	2739
Total word count - document A			3202
Total word count - document B			4209
Total word count - documents A + B			7411

...ABSTRACT in the disk access path of a clustered computing system. Each node of the clustered computing system is provided with proxy software for handling physical **disk** access **requests** from applications executing on the **node** and for directing the **disk access requests** to an appropriate **server** to which the disk is physically attached. The proxy software on each node maintains state information for all pending **requests** originating from that **node** . In response to detection of a failure along the disk access path, the proxy software on all of the **nodes** directs all further **requests** for **disk** access to a secondary node physically attached to the same disk. (see image in original document) ...

17/5,K/53 (Item 49 from file: 349)

00740808 **Image available**

RESOURCE LOCATOR

LOCALISATEUR DE RESSOURCES

Patent Applicant/Assignee:
SUN MICROSYSTEMS INC, 901 San Antonio Road, M/S: UPAL01-521, Palo Alto, CA 94303, US, US (Residence), US (Nationality)
Inventor(s):
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ABDELNUR Alejandro, 289 East California Avenue, Sunnyvale, CA 94086, US
Legal Representative:
HECKER Gary A, The Hecker Law Group, Suite 2300, 1925 Century Park East, Los Angeles, CA 90067, US

Patent and Priority Information (Country, Number, Date):
Patent: WO 200054151 A2 20000914 (WO 0054151)
Application: WO 2000US6550 20000310 (PCT/WO US0006550)
Priority Application: US 99267794 19990312
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: G06F-009/46
Publication Language: English
Filing Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 12830

English Abstract

One or more embodiments of the invention comprise a computing environment that offers a level of decentralization wherein application server code resident on a remote application server can be distributed to a local server. The local server becomes a local application **server** for a **client** . A **request** for information by a **client** is serviced by a **request** handler on the local application **server** . If the information is available on the local application **server** , the **request** handler satisfies the **request** using this information. If the information is not available locally, the request handler can **access** the remote application **server** to obtain the requested information. When the information is copied to the local application **server** , the **request** handler retains a copy of the information and forwards a copy to the **client** . Thus, subsequent **requests** can be satisfied without **accessing** the remote application **server** . Where the information cannot be transferred to the local application **server** , the **request** handler can establish a **proxy** to the remote application **server** that forwards a **client request** to the remote application **server** and a response from the remote application server to the client. The client communicates with the remote application server via the proxy on the local application server and is unaware of the remote application server. During a login process, the client establishes its identity which can be used for multiple applications and information **requests** . The local **server** generates a **credential** for the client that can be used to **authorize access** to any application **server** and/or service needed by the client.

French Abstract

Un ou plusieurs modes de realisation de l'invention comprennent un environnement informatique qui offre un niveau de decentralisation dans lequel un code serveur d'application loge sur un serveur d'application a distance peut etre distribue a un serveur local. Ce serveur local devient un serveur d'application local pour un client. Une demande d'information d'un client est satisfaite par un pilote de demande sur le serveur

d'application local. Si l'information est disponible sur le serveur d'application local, le pilote de demande satisfait la demande en utilisant cette information. Si l'information n'est pas disponible localement, le pilote de demande peut avoir acces au serveur d'application a distance de facon a obtenir l'information demandee. Lorsque l'information est copiee au niveau du serveur d'application local, le pilote de demande garde une copie de l'information et fait suivre une copie au client. Ainsi, des demandes ulterieures peuvent-elles etre satisfaites sans qu'il soit necessaire d'acceder au serveur d'application a distance. Lorsque l'information ne peut pas etre transferee au serveur d'application local, le pilote de demande peut definir un mandataire au niveau d'un serveur d'application a distance qui envoie une demande de client au serveur d'application a distance et une reponse emanant du serveur d'application a distance au client. Le client communique avec le serveur d'application a distance via le mandataire sur le serveur d'application local et le serveur d'application a distance est invisible du point de vue de ce client. Au cours d'un processus d'entree en communication, le client etablit son identite qui peut etre utilisee pour de multiples applications et demandes d'information. Le serveur local genere un passe pour le client qui peut etre utilise pour autoriser l'acces a tous les serveurs d'application et/ou aux services necessaires au client.

Legal Status (Type, Date, Text)

Publication	20000914	A2 Without international search report and to be republished upon receipt of that report.
Search Rpt	20001228	Late publication of international search report
Examination	20010201	Request for preliminary examination prior to end of 19th month from priority date

English Abstract

...decentralization wherein application server code resident on a remote application server can be distributed to a local server. The local server becomes a local application **server** for a **client** . A **request** for information by a **client** is serviced by a **request** handler on the local application **server** . If the information is available on the local application **server** , the **request** handler satisfies the **request** using this information. If the information is not available locally, the request handler can **access** the remote application **server** to obtain the requested information. When the information is copied to the local application **server** , the **request** handler retains a copy of the information and forwards a copy to the **client** . Thus, subsequent **requests** can be satisfied without **accessing** the remote application **server** . Where the information cannot be transferred to the local application **server** , the **request** handler can establish a **proxy** to the remote application **server** that forwards a **client request** to the remote application **server** and a response from the remote application server to the client. The client communicates with the remote application server via the proxy on the local...

...is unaware of the remote application server. During a login process, the client establishes its identity which can be used for multiple applications and information **requests** . The local **server** generates a **credential** for the client that can be used to **authorize access** to any application **server** and/or service needed by the client.

17/5,K/54 (Item 50 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

00739210 **Image available**

METHOD AND SYSTEM FOR DATA PROCESSING BY PROXY

PROCEDE ET APPAREIL DE TRAITEMENT DE DONNEES PAR PROCURATION

Patent Applicant/Assignee:

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Inventor(s):

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Legal Representative:
HECKER Gary A (et al) (agent), The Hecker Law Group, Suite 2300, 1925 Century Park East, Los Angeles, CA 90067, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200052574 A2-A3 20000908 (WO 0052574)
Application: WO 2000US5115 20000229 (PCT/WO US0005115)
Priority Application: US 99259196 19990301
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: G06F-009/455
Publication Language: English
Filing Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 5070

English Abstract
A client/server computer system comprising: a communication link; a plurality of **server** computers including a dual- **role** proxy **server** computer connected to the communication link; a storage device connected to the communication link for storing information; and at least one client computer connected to the communication link. The **client computer** generates **requests** to the **proxy server computer** for processing certain information on the storage device. In response, the proxy **server** computer **accesses** said information on the storage device and associates program instructions to the information for processing the information. Thereafter, the proxy server computer processes the information according to the program instructions.

French Abstract
L'invention concerne un systeme informatique client/serveur dote d'une liaison de transmission, de plusieurs ordinateurs serveurs comprenant un ordinateur serveur mandataire a double fonction relie a la liaison de transmission; d'un dispositif de stockage relie a la liaison de transmission destine a stocker des informations et au moins d'un ordinateur client relie a la liaison de transmission. L'ordinateur client genere des demandes destinees a l'ordinateur serveur mandataire afin de traiter certaines informations sur le dispositif de stockage. En reponse, ledit ordinateur serveur accede auxdites informations sur le dispositif de stockage et leur associe des instructions de programme pour leur traitement. L'ordinateur serveur mandataire traite alors les informations conformement aux instructions du programme.

Legal Status (Type, Date, Text)
Publication 20000908 A2 Without international search report and to be republished upon receipt of that report.
Examination 20001130 Request for preliminary examination prior to end of 19th month from priority date
Search Rpt 20010301 Late publication of international search report
Republication 20010301 A3 With international search report.
Fulltext Availability:
Claims

English Abstract
A client/server computer system comprising: a communication link; a plurality of **server** computers including a dual- **role** proxy **server** computer connected to the communication link; a storage device connected to the communication link for storing information; and at least one client computer connected to the communication link. The **client computer** generates **requests** to the **proxy server computer** for

processing certain information on the storage device. In response, the proxy **server** computer **accesses** said information on the storage device and associates program instructions to the information for processing the information. Thereafter, the proxy server computer processes the information...

Claim
... information thereon, wherein
the storage device is connected to the communication link; and
(d) at least one client computer connected to the communication link, the **client computer** generating **requests** to the **proxy server computer** for processing certain information on the storage device, the proxy **server** computer
accessing said information on the storage device and associating program
instructions to said information for processing said information, wherein the proxy server computer processes said information...

...of proxy server
computers connected to the communication link; and
(b) the client computer generates one or more requests to one or more of said **proxy server computers** , each **request** being directed to a **proxy server** computer for processing certain information on the storage device, the proxy **server** computer **accessing** said information on the storage device and
associating program instructions to said information for processing said information, wherein the proxy server computer processes said information ...

17/5,K/56 (Item 52 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00737981 **Image available**
NEW MEDIA ELECTRONIC COMMERCE (NMEC) SYSTEM AND METHOD
NOUVEAUX SYSTEMES ET PROCEDES DE COMMERCE ELECTRONIQUE MEDIA (NMEC)
Patent Applicant/Assignee:
INTERNET PLUS INC, 970 Napa Valley Corporate Way, Napa, CA 94558-7505, US , US (Residence), US (Nationality)
Inventor(s):
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WEBSTER Mark K, 1504 Eric Court, Petaluma, CA 94954, US
Legal Representative:
NATOLI Anthony J, Brown Raysman Millstein Felder & Steiner, LLP, 120 West Forty-Fifth Street, New York, NY 10036, US
Patent and Priority Information (Country, Number, Date):
Patent: WO 200050968 A2 20000831 (WO 0050968)
Application: WO 2000US4789 20000225 (PCT/WO US0004789)
Priority Application: US 99121944 19990226
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: G06F
Publication Language: English
Filing Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 27174

English Abstract

A system and method to conduct electronic commerce not necessarily over the Internet has a plurality of individual consumers, network groups of consumers, and a server. The consumers receive a distributed computer-readable medium having: a pre-stored interactive database of product information of a plurality of products; and predetermined software for performing graphic-user-interface-based review, selection, and order processing by a respective consumer of selected products from the pre-stored interactive database to generate the pre-stored order stored in the respective computer of the respective consumer. The predetermined software is installable on a computer associated with a respective consumer, with the predetermined software isolated from and not in constant communication with the Internet. The server includes a communications module with electronic communication connections to a computer of a consumer and for receiving the pre-stored order therefrom, and an order-processing module for processing the transmitted pre-stored order for product fulfilment.

French Abstract

La presente invention concerne un systeme et un procede de commerce electronique, ne s'effectuant pas necessairement sur Internet, et concernant plusieurs consommateurs individuels, des groupes de consommateurs sur reseau, et un serveur. Les consommateurs recoivent un support informatique comprenant une base de donnees interactive d'information sur plusieurs produits et un logiciel predetermine permettant a l'utilisateur de proceder, par l'intermediaire de l'interface utilisateur, a la visualisation, a la selection et au traitement graphiques de la commande de produits selectionnes dans la base de donnees interactive preenregistree memorisee, afin de generer la commande preenregistree memorisee dans l'ordinateur du consommateur. Le logiciel predetermine peut etre installe sur un ordinateur associe a un consommateur, le logiciel etant isole et sans communication continue par rapport a Internet. Le serveur comprend un module de communication equipe de connexions de communication electroniques le reliant a l'ordinateur d'un consommateur, et destine a en recevoir la commande preenregistree, et un module de traitement de commande destine a traiter la commande predeterminee transmise pour la livraison du produit.

Legal Status (Type, Date, Text)
Publication 20000831 A2 Without international search report and to be republished upon receipt of that report.
Examination 20010104 Request for preliminary examination prior to end of 19th month from priority date

Fulltext Availability:
Claims

Claim
... St (tern In the Product database changed
Product ate
at
Servic .....
11 NMEC server list
Info objects
I'M
Produc
t
Databas
QL1
FIGe 21
Client Servers
Request to register
Manual Registration: Sends a Users Registration ...Info object from
Order Info
object and write user info to server
database
FIG9 22A
Initialize the framework and
shows Startup dialog

Date expired: YES **Query computer** 's registry
database to determine product
expiration date.
Date expired: NO
Give user option to **request Query computers** registry First launch:
YES
for a new CD-ROM database to determine if this is
containing new product the first launch after installation. **database** .
Request : YES **Request** : NO First launch: NO
IF
Perform **Request Query computers** registry for
new **CD** -ROM last product update time and Not within allowed time
operation determine if user can request
for product update and order
status within allowed time...

17/5,K/59 (Item 55 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00549737 **Image available**
AN APPARATUS AND METHOD FOR IMPROVING PERFORMANCE OF PROXY SERVER ARRAYS THAT USE PERSISTENT CONNECTIONS
APPAREIL ET PROCEDE POUR AMELIORER LES PERFORMANCES DE RESEAUX DE SERVEURS PROXY UTILISANT DES CONNEXIONS PERSISTANTES
Patent Applicant/Assignee:
SUN MICROSYSTEMS INC,
Inventor(s):
GUPTA Amit,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200013110 A1 20000309 (WO 0013110)
Application: WO 99US19756 19990825 (PCT/WO US9919756)
Priority Application: US 98140094 19980826
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
Main International Patent Class: G06F-017/30
International Patent Class: H04L-029/06
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 9140

English Abstract
A method and apparatus that ensures that requests for pages in a particular domain name are routed to the same proxy server by all of a plurality of clients. If, for example, a proxy server has a persistent connection to a **server** for a domain, all incoming **requests** for that domain will be sent to the proxy server and will, thus, be able to take advantage of the persistent connection . Each client contains a proxy table that is periodically updated by one or more of the proxy servers. A proxy table in a client contains an entry corresponding to each proxy **server** . When a client needs to **access** a resource through a proxy **server** , the client truncates the address (e.g., the URL) of the resource. Thus, for example, all addresses in a particular domain name are truncated to the same value. The truncated address is then used to hash into the proxy table in the client and to identify a **proxy server** . The **client** sends its **request** to the identified **proxy server** . Thus, all **requests** for a particular domain hash to the same proxy table entry and, hence, to the same proxy server. If the proxy server has opened a persistent connection to the server for the requested domain, the proxy server will be able to take advantage of the persistent connection.

French Abstract
L'invention concerne un procede et un appareil qui prennent en charge les demandes de pages contenues dans un nom de domaine donne de maniere a ce que ces demandes emanant de plusieurs clients soient acheminees vers le meme serveur proxy. Si, par exemple, un serveur proxy possede une connexion persistante a un serveur pour un domaine donne, toutes les demandes entrantes qui concernent ce domaine sont renvoyees au serveur proxy et peuvent par consequent profiter des avantages de la connexion persistante. Chaque client contient une table de serveurs proxy, periodiquement mise a jour par un ou plusieurs serveurs proxy. Chez un client, la table de serveurs proxy contient une entree qui correspond a chaque serveur proxy. Lorsqu'un client desire d'acceder a une ressource a travers un serveur proxy, il tronque l'adresse (par exemple, l'URL) de la ressource; ainsi, par exemple, toutes les adresses pour un domaine particulier sont tronquees a la meme valeur. L'adresse tronquee est ensuite utilisee pour le hachage dans la table de serveurs proxy chez le client et pour l'identification d'un serveur proxy. Le client envoie sa demande au serveur proxy identifie. Ainsi, pour toutes les demandes pour un domaine donne on procede au hachage dans une meme table de serveurs proxy et, partant, dans le meme serveur proxy. Si le serveur proxy a ouvert une connexion persistante avec le serveur du domaine demande, ce serveur proxy sera capable de profiter des avantages de la connexion persistante.

Fulltext Availability:
Claims

English Abstract
...routed to the same proxy server by all of a plurality of clients. If, for example, a proxy server has a persistent connection to a **server** for a domain, all incoming **requests** for that domain will be sent to the proxy server and will, thus, be able to take advantage of the persistent connection . Each client contains...

...that is periodically updated by one or more of the proxy servers. A proxy table in a client contains an entry corresponding to each proxy **server** . When a client needs to **access** a resource through a proxy **server** , the client truncates the address (e.g., the URL) of the resource. Thus, for example, all addresses in a particular domain name are truncated to the same value. The truncated address is then used to hash into the proxy table in the client and to identify a **proxy server** . The **client** sends its **request** to the identified **proxy server** . Thus, all **requests** for a particular domain hash to the same proxy table entry and, hence, to the same proxy server. If the proxy server has opened a...

Claim
... in the proxy table.

9 The method of claim 1, wherein the step of accessing a proxy server includes the step of sending, by the **client** , an http **request** to the **proxy server** at a URL contained within the proxy table in the client in accordance with the index value. 1 0. A method of **accessing** information in a client/ **server** network, comprising the steps, performed by a client in the client/server network, of: receiving an address of a first page to access, the first...

...the client, the first index value and the second index value always being equal because the first and second page are stored on the same **server** ; and **accessing** the same proxy **server** to **access** the first and second page on the first server, the same proxy server being identified by the first and second index values in the proxy...

17/5,K/63 (Item 59 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00450528 **Image available**

METHODS AND APPARATUS FOR CONTROLLING ACCESS TO INFORMATION
PROCEDES ET APPAREIL DE CONTROLE D'ACCES A DES INFORMATIONS

Patent Applicant/Assignee:
INTERNET DYNAMICS INC,
Inventor(s):
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LIPSTONE Laurence R,
RIBET Michael B,
SCHNEIDER David S,

Patent and Priority Information (Country, Number, Date):
Patent: WO 9840992 A2 19980917
Application: WO 98US4522 19980309 (PCT/WO US9804522)
Priority Application: US 9739542 19970310; US 9740262 19970310; US 9834587 19980304; US 9834503 19980304; US 9834507 19980304; US 9834576 19980304
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Main International Patent Class: H04L-029/06
International Patent Class: H04L-012/24; G06F-001/00
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 38574

English Abstract
A scalable access filter that is used together with others like it in a virtual private network to control access by users at clients in the network to information resources provided by servers in the network. Each access filter uses a local copy of an access control data base to determine whether an access request is made by a user. Changes made by administrators in the local copies are propagated to all of the other local copies. Each user belongs to one or more user groups and each information resource belongs to one or more information sets. Access is permitted or denied according to access policies which define access in terms of the user groups and information sets. The rights of administrators are similarly determined by administrative policies. Access is further permitted only if the trust levels of a mode of identification of the user and of the path in the network by which the access is made are sufficient for the sensitivity level of the information resource. If necessary, the access filter automatically encrypts the request with an encryption method whose trust level is sufficient. The first access filter in the path performs the access check and encrypts and authenticates the request; the other access filters in the path do not repeat the access check.

French Abstract
La presente invention concerne un filtre d'acces factorisable utilise conjointement avec d'autres filtres analogues dans un reseau prive virtuel de maniere a controler l'acces des utilisateurs presents chez des clients du reseau a des ressources d'information fournies par des serveurs du reseau. Chaque filtre d'acces utilise une copie locale d'une base de donnees de controle d'acces destinee a determiner si une demande d'acces a l'information est faite par un utilisateur. On repercute sur toutes les autres copies locales les modifications effectuees par des administrateurs dans les copies locales. Chaque utilisateur appartient a un ou plusieurs groupes d'utilisateurs et chaque ressource d'information appartient a un ou plusieurs ensembles d'informations. L'acces est autorise ou refuse selon des politiques d'acces qui definissent l'acces en terme de groupes d'utilisateurs et d'ensembles d'informations. De meme, les droits des administrateurs sont determines par des politiques

d'administrations. L'acces est, en outre, autorise uniquement si les niveaux de confiance d'un mode d'identification de l'utilisateur et si le chemin du reseau par lequel l'acces est effectue sont suffisants pour le niveau de sensibilite de la ressource information. Si necessaire, le filtre d'acces chiffre automatiquement la requete par un procede de chiffrement dont le niveau de confiance est suffisant. Le premier filtre d'acces au chemin execute la verification de l'acces, chiffre et authentifie la requete, les autres filtres d'acces au chemin ne repetant pas la verification d'acces.

Fulltext Availability:
Claims

Claim
... 106 through I 1 1 wherein:
the path trust level is subject to change; and
the access checker checks the path trust level for every **request** . 113. A data **storage device** for use in a system including a processor, the data storage
device being characterized in that:
the data storage device contains code which, when executed...network that further includes clients and servers that provide information resources to the clients via a path in the network in response to an access **request** from a user on a **client** , the access filters each being capable of making a determination whether the access request should be allowed, and if the request is to be allowed...

...122. The improved access filter set forth in claim 121 wherein:
the path to an information resource includes a last access filter through which the **request** passes en route to a **server** of the servers that provides the information resource; when the access filter is the other access filter, the other access filter directs the
encrypted request to the last access filter; and
when the access filter is the last access filter, the request is decrypted and routed to the **server** .
123. The **access** filter set forth in claim 122 wherein:
each of the access filters has a key for encrypting requests to be decrypted by the
access filter...when the determination indicates that access will be allowed, the access request is encrypted.
125. The access filter set forth in claim 124 wherein:
the **client** encrypts the access **request** before sending the request to the access filter;
and
when the access check confirmer determines that the access check has not been made, the access...

...The access filter set forth in any one of claims 124 through 127 wherein: the server that provides the resource has a key for encrypting **requests** to be
decrypted by the **server** ;
I 0 the **access** filter nearest the **server** has key information which gives the access filter
access to the public key belonging to the **server** ; and
the access filter nearest the **server** reencrypts the **access request** using the key belonging to the **server** . 5 131. An **access** filter which is used as one of a plurality of access filters in a network, the access filter serving to make a determination whether a...the encryption method is at least equal to the sensitivity level of the resource.
135. The access filter set forth in claim 132 wherein:
the **client** encrypts the **request** ; and
the access filter employes the encrypter-decrypter to decrypt the request prior to making the determination. 136. The access filter set forth in any...

17/5,K/64 (Item 60 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00406198 **Image available**

METHOD AND APPARATUS FOR PROVIDING PROXYING AND TRANSCODING OF DOCUMENTS IN A DISTRIBUTED NETWORK

PROCEDE ET APPAREIL PERMETTANT DE RECUPERER INDIRECTEMENT ET DE TRANSCODER DES DOCUMENTS DANS UN RESEAU REPARTI

Patent Applicant/Assignee:
WEBTV NETWORKS INC,
Inventor(s):
MIGHDOLL Lee S,
LEAK Bruce A,
PERLMAN Stephen G,
GOLDMAN Phillip Y,

Patent and Priority Information (Country, Number, Date):
Patent: WO 9746943 A1 19971211
Application: WO 97US9557 19970528 (PCT/WO US9709557)
Priority Application: US 96656924 19960603
Designated States: AL AM AT AT AU AZ BA BB BG BR BY CA CH CN CU CZ CZ DE DE DK DK EE EE ES FI FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SK TJ TM TR TT UA UG UZ VN YU GH KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Main International Patent Class: G06F-013/00
International Patent Class: G06F-13:14; G06F-11:34; H04L-09:00
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 10594

English Abstract

A method of providing a document to a client (1) coupled to a server (5) is provided. The server (5) provides a number of Internet services to the client (1), including functioning as a caching proxy on behalf of the client for purposes of accessing the World Wide Web (3). The proxying server (5) includes a persistent document database (61), which stores various attributes of all documents previously retrieved in response to a request from a client (1). The document is transcoded for various purposes, including to circumvent bugs found in the document, to size the document for display on a television, to improve transmission efficiency, and to reduce latency.

French Abstract

Procede permettant de fournir un document a un client (1) connecte a un serveur (5). Ledit serveur (5) fournit un certain nombre de services Internet au client (1), y compris le fait de fonctionner en tant qu'antememoire mandataire au nom du client afin que ce dernier puisse avoir acces au World Wide Web (3). Le serveur (5) mandataire comporte une base de donnees (61) de documents constante qui met en memoire divers attributs de tous les documents precedemment recuperes en reponse a une demande du client (1). Le document est transcode a diverses fins, y compris pour tourner des erreurs ou defauts trouves dans le document, pour mettre le document au format afin de pouvoir l'afficher sur un ecran de television, pour ameliorer l'efficacite de transmission du document et pour reduire le temps de latence.

Fulltext Availability:
Claims

Claim

... 20, wherein the second service is a proxy service by which the server functions as a proxy on behalf of the client for purposes of **accessing** a second **server** .

23 In **server** system coupled to a client, a method of providing the client with a plurality of redundant services, each of the redundant

services being substantially equivalent...

...each service;
providing the client with a unique protocol for each service;
- 35 receiving a request to access one of the redundant services from the **client** , the **request** including an address specifying the service name; and
granting access to one of the redundant services in accordance with the name included in the address...

17/5,K/65 (Item 61 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00375142 **Image available**
MANAGING TRANSFERS OF INFORMATION IN A COMMUNICATIONS NETWORK
GESTION DES TRANSFERTS D'INFORMATIONS DANS UN RESEAU DE COMMUNICATION
Patent Applicant/Assignee:
OPEN MARKET INC,
Inventor(s):
ELLIS John R,
GIFFORD David K,
TREESE Winfield G,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9715885 A1 19970501
Application: WO 96US16441 19961016 (PCT/WO US9616441)
Priority Application: US 95548137 19951025
Designated States: JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Main International Patent Class: G06F-013/00
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 10582
English Abstract
The invention features various techniques for managing transfers of information in public packet switched communications networks. In one aspect, the invention provides a system for identifying updated items of network-based information, such as pages, to users (16) in a network (12, 14, 30). Another aspect of the invention features a system for implementing security protocols. Another aspect of the invention features a system for managing authenticating credentials of a user (16). Another aspect of the invention features a system for inducing advertisers to target advertisements to consumers (16). Another aspect of the invention features a system for extracting data from sources of network-based information in a communications network (12, 14, 30).

French Abstract
L'invention concerne differentes techniques pour gerer les transferts d'information dans un reseau public de communication a commutation par paquets. Selon un aspect, l'invention concerne un systeme permettant d'identifier, au benefice des utilisateurs (16) du reseau (12, 14, 30), des elements mis a jour d'informations en reseau, comme par exemple des pages. Un autre aspect de l'invention concerne un systeme de mise en oeuvre de protocoles de securite. Un autre aspect de l'invention concerne un systeme permettant de verifier l'identite d'un utilisateur (16). Un autre aspect encore de l'invention concerne un systeme incitant les utilisateurs a cibler leur publicite en fonction des consommateurs (16). Un autre aspect enfin de l'invention concerne un systeme permettant d'extraire des donnees de sources d'informations en reseau, dans le reseau de communication (12, 14, 30).

Fulltext Availability:
Claims

Claim
... said link into said protocol

patent retrieved

incompatible with said network tool, and requesting said second item of network-based information from said one of said network **servers** ,

31 A system for managing **authenticating** credentials of a user of a public packet switched communications network comprising a plurality of network **servers** programmed to receive **requests** from users for items of network-based information and to transmit said 15 items of network-based information to said users in response to said requests, comprising:
a network tool, implemented on a **computer** , programmed to create a **request** for an item of network based information from one of said network servers in 20 response to input from a user, and to receive said item of network-based information in response to said **request** ;
a **proxy server** , implemented on a computer, programmed to maintain a table of authenticating credentials for each of said plurality of network 25 **servers** , to receive said **request** from said network tool, to forward said request to said one of said network **servers** , to receive a **request** for **authentication** from said one of said network **servers** , to retrieve from said table **authenticating** credentials for said one of said 30 network **servers** ,, to transmit said **authenticating** **credentials** to said network **server** , to receive said item of network-based information from said network server, and to forward said item of network-based information to said network tool...

18/5,K/7 (Item 7 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00512958

Intelligent page store for concurrent and consistent access to a database by a transaction processor and a query processor.

Intelligenter Seitenspeicher fur gleichzeitigen und konsequenten Zugriff auf eine Datenbank durch einen Transaktions- und Such-Prozessor.

Memoire de page intelligente pour l'acces simultane et consistant a une base de donnees par un processeur de transaction et de recherche.

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LEGAL REPRESENTATIVE:
Schafer, Wolfgang, Dipl.-Ing. (62021), IBM Deutschland Informationssysteme GmbH Patentwesen und Urheberrecht, D-70548 Stuttgart, (DE)

PATENT (CC, No, Kind, Date): EP 501160 A2 920902 (Basic)
EP 501160 A3 930908
APPLICATION (CC, No, Date): EP 92101502 920130;
PRIORITY (CC, No, Date): US 660769 910225
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: G06F-015/403;

CITED REFERENCES (EP A):
ACM TRANSACTIONS ON DATABASE SYSTEMS. vol. 7, no. 2, June 1982, NEW YORK US pages 209 - 234 GARCIA-MOLINA H.,WIEDERHOLD G. 'Read-Only Transactions in a Distributed Database'
IEEE PROCEEDINGS OF THE 6TH INTERNATIONAL CONFERENCE ON DATA ENGINEERING, CAT. NO. 90CH2840-7, 9 February 1990, LOS ANGELES, CA, USA pages 512 - 520 SEGEV A., FANG W. 'CURRENCY-BASED UPDATES TO DISTRIBUTED MATERIALIZED VIEWS';

ABSTRACT EP 501160 A2

A method and apparatus, embodied in an Intelligent Page Store (10), for providing concurrent and consistent access to a functionally separate transaction entity and a query entity to a shared database, while maintaining a single physical copy of most of the data. The Intelligent Page Store (10) contains shared disk storage, and an intelligent versioning mechanism allows simultaneous access by the transaction en-tity and the query entity to the shared data. The transaction entity is presented the current data and the query entity is presented a recent and consistent version of the data. A single copy of all but recently updated pages is maintained by the Intelligent Page Store (10). The query and transaction entities operate independently of each other and are separately optimized. (see image in original document)

ABSTRACT WORD COUNT: 131

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application:	920902	A2	Published application (A1with Search Report ;A2without Search Report)
Change:	930407	A2	Representative (change)
Change:	930512	A2	Representative (change)
Search Report:	930908	A3	Separate publication of the European or International search report
Change:	940921	A2	Representative (change)
Withdrawal:	941130	A2	Date on which the European patent application was deemed to be withdrawn: 940309

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	722
SPEC A	(English)	EPABF1	7102

Total word count - document A 7824
Total word count - document B 0
Total word count - documents A + B 7824

...CLAIMS physical copy of any page of said database which is the same in said primary version and said at least one snapshot version of said **database** ;

a **transaction processor** for **accessing** and updating said primary version pages of said database, said primary version pages being made available to said **transaction processor** by said intelligent page **store** ; and

a **query processor** independent of said **transaction processor** for running **queries** against said at least one consistent snapshot version of said database, said at least one consistent snapshot version of said **database** being made available to said **query processor** .

2. A **database** system as defined in Claim 1 wherein said **transaction processor** and said **query processor** are different physical entities.
3. A database system as defined in Claim 1 wherein said transaction processor and said query processor are independent processes implemented...

18/5,K/8 (Item 8 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00401126
Remote execution of database transactions.
Fernausfuhrung von Datenbanktransaktionen.
Execution a distance de transactions de base de donnees.
PATENT ASSIGNEE:
International Business Machines Corporation, (200120), Old Orchard Road, Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB)
INVENTOR:
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Horn, Gary Randall, 12046 Lincolnshire, Austin, Texas 78758, (US)
Jeffries, Lynn Mary, 6300 Sprucewood Cove, Austin, Texas 78731, (US)
LEGAL REPRESENTATIVE:
Bailey, Geoffrey Alan (27921), IBM United Kingdom Limited Intellectual Property Department Hursley Park, Winchester Hampshire SO21 2JN, (GB)
PATENT (CC, No, Kind, Date): EP 398641 A2 901122 (Basic)
EP 398641 A3 921230
APPLICATION (CC, No, Date): EP 90305214 900515;
PRIORITY (CC, No, Date): US 352079 890515
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: G06F-015/40;
CITED REFERENCES (EP A):
MINI-MICRO SYSTEMS September 1983, pages 197 - 202 KAVALER AND GREENSPAN 'Extending UNIX to local-area networks'
PROGRAMMER'S JOURNAL JAN. - FEB. 1987 vol. 5, no. 1, pages 22 - 25 GRECO 'Redirection, or "They went that-a-way" (MS-DOS)';

ABSTRACT EP 398641 A2
A method and data processing network for permitting the remote execution of database transactions by one or more personal computers without a direct access storage device (30). At least one personal computer without a direct access storage device is linked to a personal computer having a direct access storage device (28) and access to a selected database. Network and communications software installed on the personal computer having direct access storage devices is then utilized to remotely initiate each of the personal computers without direct access storage devices which is linked thereto. Next, a single copy of database server software code is installed on the personal computer having direct access storage devices and a catalog is created and stored which

identifies selected personal computers without direct access storage devices which may access the database server software code. File redirection is then utilized to permit selected personal computers without direct access storage devices to remotely execute the database server software code so that database transactions may be remotely executed. In a preferred embodiment of the disclosed method, each individual personal computer without direct access storage device may be utilized to remotely execute database transactions as a server device, a requester device or a stand-alone device. (see image in original document)
ABSTRACT WORD COUNT: 212

LEGAL STATUS (Type, Pub Date, Kind, Text):
Application: 901122 A2 Published application (Alwith Search Report ;A2without Search Report)
Examination: 910206 A2 Date of filing of request for examination: 901213
Search Report: 921230 A3 Separate publication of the European or International search report
Withdrawal: 930120 A2 Date on which the European patent application was withdrawn: 921116
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	496
SPEC A	(English)	EPABF1	1932
Total word count - document A			2428
Total word count - document B			0
Total word count - documents A + B			2428

...CLAIMS computer without a direct access storage device.
6. A method as claimed in claim 5 wherein said catalog indicates whether a computer without a direct **access** storage **device** is executing **database transactions** as a **server device** , a requester device or a stand-alone device.
7. A method as claimed in any of claims 5 or 6 further including the step of...

18/5,K/9 (Item 9 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00240361
Data base processor and its method of operation.
Datenbankprozessor und Betriebsverfahren dafur.
Processeur d'une base de donnees et son procede de mise en oeuvre.
PATENT ASSIGNEE:
International Business Machines Corporation, (200120), Old Orchard Road, Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB;IT)
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Sandin, Henrik Emanuel, Boholmsstigen 2, S-181 46 Lidingo, (SE)
LEGAL REPRESENTATIVE:
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PATENT (CC, No, Kind, Date): EP 244625 A1 871111 (Basic)
EP 244625 B1 920129
APPLICATION (CC, No, Date): EP 87104572 870327;
PRIORITY (CC, No, Date): SE 861973 860429
DESIGNATED STATES: DE; FR; GB; IT
INTERNATIONAL PATENT CLASS: G06F-013/14; G06F-015/16; G06F-015/40;
CITED PATENTS (EP A): US 3889237 A; US 4044337 A; US 4078254 A

ABSTRACT EP 244625 A1

In a data processing system a data base processor includes data base means (32) storing a plurality of tables and a data base manager (31) comprising a command router (34) and a plurality of command processors (80-92). Select, Copy, Create and Fit command processors (85,88,89,90) are used to select a portion of a stored source table, copy it into a target table, create new rows and fill them with new data. The source table and the target table can be compared by presenting them as a view on a user terminal. The target table may be located in the same data base as the source table or in an auxiliary data base connectable and disconnectable to and from the main data base. A production control dialog (70) is used for data source and data base identification and modification purpose.

The data base processor is preferably used as a Service Level Reporter (SLR) including a main data base for actual data and an auxiliary data base for forecasting data.

ABSTRACT WORD COUNT: 172

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application:	871111	A1	Published application (Alwith Search Report ;A2without Search Report)
Examination:	880420	A1	Date of filing of request for examination: 880224
Change:	880727	A1	Representative (change)
Examination:	890830	A1	Date of despatch of first examination report: 890713
Change:	900307	A1	Representative (change)
Grant:	920129	B1	Granted patent
Oppn None:	930120	B1	No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	1070
CLAIMS B	(German)	EPBBF1	920
CLAIMS B	(French)	EPBBF1	1382
SPEC B	(English)	EPBBF1	6441
Total word count - document A			0
Total word count - document B			9813
Total word count - documents A + B			9813

...CLAIMS columns and rows, and a data base manager (31) comprising a main line module (33) for storage area and data base initialization, a plurality of **command processors** (35) **and a command** router (34) **for** receiving a command and passing **it** to a corresponding **command processor** (80- **92**), **a** copy **processor** (88) amongst said plurality **of command processors** for receiving a **copy command** from the **command** router **and** for copying selected portions of a source table in the data base into a target table, said selected portions being defined by a select **command processor** (85), characterized by **a create processor** (89) for receiving a create **command** from the command router and for creating selected new rows in the target table, said selected rows being **defined** by a row select **command** , selected rows containing at least one key value relating to time, whereby the create **processor** analyzes the row select **command** information (123), defines the number of rows to be created, initializes and writes the first row into the target table in a first step (124, 125) and **repeats the** initialization and writing **step** (125-128) for further rows until a new row for every possible combination of time keys in the selected range has been **created , said** created new rows **containing** information defined by the row select **command** including in particular said time **keys** .

2 . A data base processor according to claim 1, **wherein** said row select **command** information relates to time periods taken from a calendar table comprising year, month, and day time information.

3. A data base **processor** according to claim 1, wherein said plurality of **command processors** comprises a fit **processor** (90) for filing in data into the created new rows.

4. A data base processor according to claim 1, wherein the data base is a...

...and the target table is located in an auxiliary data base (42), both data bases being controlled by the data base manager (31).

6. A **data base processor** according to claim **1 and** 5, wherein said plurality of **command processors** comprises a connect **processor (91) for** connecting and disconnecting the auxiliary data base (42) to and from the first data base (41).
7. A data base **processor** according to any of **the claims** 1-6, wherein a collect **command processor** (80) in the data base manager (31) collects data from the sub systems (8-18) of the data processing system and summarizes such data into...

...9. A data base processor according to claim 8, wherein the processor operates as a service level reporter providing management reporting related to performance, availability, **operation** and the like of the **data** processing system.

10. A data base processor according to any of the claims 1-9, wherein production control dialog means (70) are provided for storing...

18/5,K/33 (Item 23 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00764220 **Image available**
NETWORK PROXY FOR DEVICES WITH LIMITED RESOURCES
RESEAU MANDATAIRE DESTINE A DES DISPOSITIFS A RESSOURCES LIMITEES
Patent Applicant/Assignee:
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Legal Representative:
GARRETT Arthur S, Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P., 1300 I Street, N.W., Washingotn, DC 20005-3315, US
Patent and Priority Information (Country, Number, Date):
Patent: WO 200077635 A1 20001221 (WO 0077635)
Application: WO 2000US16080 20000613 (PCT/WO US0016080)
Priority Application: US 99332031 19990614
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: G06F-009/46
Publication Language: English
Filing Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 14925

English Abstract
A network proxy is provided that facilitates the integration of orphan services into a network by enabling them to interact with a lookup service that contains an indication of the services that are available on the network. These orphan services typically reside on devices having too little memory to run the components necessary to be integrated into the network. Thus, the network proxy acts as a go between, by registering the orphan services with the lookup service so that clients may access them and by accessing services on behalf of the orphan services. As a result, the network proxy integrates orphan services into the network, when they otherwise would be incapable of doing so.

French Abstract
L'invention concerne un reseau mandataire facilitant l'integration de services orphelins dans un reseau, pour ce faire il leur permet d'interagir avec un service de recherche qui contient une indication sur les services disponibles sur le reseau. Ces services orphelins se trouvent generalement sur des dispositifs qui ont trop peu de memoire pour faire fonctionner les composants devant etre integres au reseau. Le reseau mandataire agit donc comme un intermediaire entre d'une part, l'enregistrement des services orphelins au moyen du service de recherche afin que les clients puissent acceder a ces services, et d'autre part, l'acces a des services a l'aide des services orphelins. En consequence, le reseau mandataire integre des services orphelins dans le reseau, lorsque ceux-ci seraient incapables d'en faire autant.

Legal Status (Type, Date, Text)
Publication 20001221 A1 With international search report.
Publication 20001221 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.
Examination 20010426 Request for preliminary examination prior to end of 19th month from priority date
Fulltext Availability:
Claims

Claim
... associated
attributes
Lookup service assigns a
unique service ID 504
1 F
The service is now
registered in the lookup 506
service
/13
FIGs 6
Client sends a
service **request** to a @@600
server
I
Server receives the @@602
request
I
Server searches for
the stub in the -J@604
Lookup Service
No St ere 606
h ?
es
Return Null 608
ore 610
t an 1 stu...

18/5,K/34 (Item 24 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00762426 **Image available**
A SECURE INTERNET VAULT FOR CONSUMER RECEIPTS, LEGAL DOCUMENTS AND COMMERCE
CHAMBRE FORTE PROTEGEE SUR INTERNET POUR RECUS, DOCUMENTS JURIDIQUES ET COMMERCE DU CONSOMMATEUR
Patent Applicant/Assignee:
RECEIPTCITY COM INC, 3051 N. 1st Street, San Jose, CA 95134, US, US (Residence), US (Nationality)
Inventor(s):
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KAREEMI Nazim, 2145 Emerson Street, Palo Alto, CA 94301, US,
Legal Representative:
KAUFMAN Michael A (et al) (agent), Flehr Hohbach Test Albritton & Herbert LLP, 4 Embarcadero Center, Suite 3400, San Francisco, CA 94111-4187, US
,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200075835 A2-A3 20001214 (WO 0075835)
Application: WO 2000US15371 20000602 (PCT/WO US0015371)
Priority Application: US 99137575 19990604; US 99141380 19990628; US 2000480883 20000110
Designated States: CA JP
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Main International Patent Class: G06F-017/60
International Patent Class: G07F-019/00
Publication Language: English
Filing Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 17914

English Abstract
Apparatus and methods for providing an Internet site serving as a secure, electronic vault, repository or file cabinet for consumer's transaction records, legal documents, insurance policies and other secure information that consumers may wish to store on a website. This storage, provides commerce services that save the consumer time. In various embodiments, the invention is as follows: participating merchants send transactions records to the Internet site for viewing from the consumer website. To view the electronic record, the consumer visits the site, identifies himself and selects the record they wish to view. The consumer may search for a particular record using multiple criteria and view an image of the record. Once the record is selected, the consumer may download data related to the record personal-finance programs. This saves time for consumers tracking personal spending or creating expense reports. As transactions are identified and viewed, the website displays advertisements to the consumer, targeted, based upon consumer demographics, stated preferences, purchasing history or other methods.

French Abstract
L'invention concerne un appareil et des procedes destines a la creation d'un site internet servant de chambre forte electronique protegee, de referentiel ou de classeur pour les enregistrements de transactions, documents juridiques, polices d'assurance et autres informations protegees que les consommateurs souhaitent stocker sur un site web. Ce systeme de stockage fournit des services commerciaux, faisant ainsi gagner du temps au consommateur. Dans divers modes de realisation, l'invention comprend les etapes mentionnees ci-apres. Des commercants participants envoient des enregistrements de transactions au site internet afin que le consommateur puisse les visualiser depuis son site web. Pour visualiser l'enregistrement electronique, le consommateur visite le site, s'identifie et selectionne l'enregistrement qu'il souhaite visualiser. Le consommateur peut chercher un enregistrement en particulier, en utilisant de multiples criteres, et visualiser une image de l'enregistrement. Lorsque l'enregistrement est selectionne, le consommateur peut telecharger des donnees liees aux programmes de credit mobilier de l'enregistrement. Ceci permet de gagner du temps aux consommateurs voulant verifier leurs depenses personnelles ou generer des rapports sur l'etat de leurs depenses. Lorsque les transactions sont identifiees et visualisees, le site web presente des publicites au consommateur. Ces annonces peuvent etre ciblees a partir de donnees demographiques concernant les consommateurs, leurs preferences, l'historique de leurs achats ou d'autres procedes, afin de susciter un plus grand interet chez le consommateur. Le consommateur peut s'inscrire pour etre informe a l'avance concernant des evenements speciaux ou des services aide-memoire, lors d'occasions speciales d'achat (anniversaires

de mariage, anniversaires, etc.), avec des recommandations specifiques sur les marchandises. Les consommateurs peuvent commander a nouveau des produits ou etre achemines sur le site web d'achat d'un commercant pour acheter des pieces detachees ou des accessoires, en selectionnant ("cliquer sur", par exemple) l'article choisi dans un enregistrement.

Legal Status (Type, Date, Text)

Publication	20001214	A2 Without international search report and to be republished upon receipt of that report.
Examination	20010315	Request for preliminary examination prior to end of 19th month from priority date
Search Rpt	20010503	Late publication of international search report
Republication	20010503	A3 With international search report.

Fulltext Availability:
Claims

Claim
... service are the delivery of the receipt to the browser and a focus on the needs of the merchant.
The electronic-receipts service provides consumer- **transaction** details from a central **database** and presents this **transaction** information to the service user (typically, the consumer that performed the transaction). Transaction information may include the date and time of the transaction, as well...

...the electronic-receipts service
uses the data-access roles of "system," "data" and "administration" to facilitate a user's access to data.
The system-data **role** gives **access** to the relational- **database** management system (RDMS) engine to read and initialize the current user's system. It also allows access to update the logs.
The data role has...

...over a signature. The
I 0 service may restrict access to user information by requiring a password
(matching the user name). Also, as described above, **access** to **database**

data is restricted by **role** - in the manner of a need-to-know policy.
Merchants can have an administrator that can give access to outside entities to their data, to...name and requests a site ID. (The machine may encrypt the site ID before
storing the same.)
-- The Electronic-Receipts Storage Service
The electronic-receipt **storage** service receives **transaction** information from a POS platform or bulk data transfer (i.e., batch) from a
merchant and stores the information in the data farm, typically in...

...the merchant or the data farm
handles automatically.
The transaction service may be a combination of two services:
a temporary-database service and a permanent- **database** service. When the **transaction** service gets a message, it tells the temporary-database service which then stores the data into a temporary database.
The electronic-receipts service periodically merges the temporary-database data with the real electronic-receipts-service
28
database. This merge happens since batch processing also feeds data into the temporary- **transaction database** . This merge and store is the **function** of the permanent- **database** service.
A site and the electronic-receipts service may communicate
5 using messages that are name-value pairs. The following is an example of
a...

...may back up and then lock

the temporary database. The permanent-database service reads the first record and validates field names. (Of course, the INSERTO **function** for the
permanent **database** typically performs its own field **validation** .) The service uses the SitelD to find the SiteGpID. The service splits data apart
and inserts a transaction record, creating an exception record as necessary...multi-) media presentation for the
customer on a second area of the display. This second area is typically the I 0 display 220 of the **transaction computer** .
The data farm 140 may divide this second area so that multiple contents are visible to the customer simultaneously. An acceptable way of implementing these...

...summary, including a total, the customer presents a form of payment. Where the payment is a credit card, the customer swipes the card through the **transaction computer** and signs electronically, allowing the TC to capture his signature. The POS system 126 forwards the captured electronic signature to any of the merchan

t...

18/5,K/39 (Item 29 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00731955 **Image available**
METHOD AND APPARATUS FOR DISTRIBUTED DATABASE ACCESS
PROCEDE ET APPAREIL POUR L'ACCES A UNE BASE DE DONNEES REPARTIE
Patent Applicant/Assignee:
GENRAD INC, 7 Technology Park Drive, Westford, MA 01886-0033, US, US (Residence), US (Nationality)
Inventor(s):
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Patent and Priority Information (Country, Number, Date):
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Priority Application: US 99239100 19990128; US 99339724 19990624
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Main International Patent Class: G06F-015/177
International Patent Class: G06F-017/30
Publication Language: English
Filing Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 11795

English Abstract
In a distributed computing environment having a plurality of computers connected by a communications network (10), a distributed **database access** system, method and computer program product including a plurality of clients represented by software running on a computer (12) connected to the communications network (22), a plurality of databases and a connection manager (16). The connection manager maintains a plurality of database connection pools with each pool maintaining one or more database connections to a **database** (18). Upon **request** from a **client** for **database access** (20), the connection manager places the client in communication with a database connection selected from a particular database connection pool (14). The plurality of databases can include at least one database storing data in a first data storage schema and at least one database storing data in a second data **storage** schema and the **client request** for **database access** can include a reference to a

data storage schema. The invention may also be implemented within a transaction processing system.

French Abstract

Dans un environnement informatique distribue ayant une pluralite d'ordinateurs relies a un reseau de communication (10), la presente invention propose un systeme d'acces a la base de donnees repartie, un procede et un produit de programme d'ordinateur comportant plusieurs clients representes par le logiciel operant sur un ordinateur (12) relie au reseau de communication (22), une pluralite de base de donnees et un gestionnaire de connexion (16). Le gestionnaire de connexion entretient une pluralite d'ensembles de connexions de base de donnees ou chaque ensemble entretient une ou plusieurs connexions de base de donnees a une base de donnees (18). Suite a la requete d'un client pour l'acces a une base de donnees (20), le gestionnaire de connexions transmet la communication entrant avec une connexion de base de donnees selectionnee a partir d'un ensemble de connexion de base de donnees (14). La pluralite de bases de donnees peut inclure au moins une base de donnees stockant des donnees selon un premier schema de memorisation et au moins une base de donnees stockant des donnees selon un second schema de memorisation et la requete du client pour acceder a la base de donnees peut comporter une reference a un schema de memorisation. L'invention peut etre aussi utilisee dans un systeme de traitement de transaction.

Legal Status (Type, Date, Text)
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Examination 20001109 Request for preliminary examination prior to end of 19th month from priority date
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Republication 20011018 A1 With international search report.

Fulltext Availability:
Claims

English Abstract

In a distributed computing environment having a plurality of computers connected by a communications network (10), a distributed **database access** system, method and computer program product including a plurality of clients represented by software running on a computer (12) connected to the communications network (22...

...a connection manager (16). The connection manager maintains a plurality of database connection pools with each pool maintaining one or more database connections to a **database** (18). Upon **request** from a **client** for **database access** (20), the connection manager places the client in communication with a database connection selected from a particular database connection pool (14). The plurality of databases can include at least one database storing data in a first data storage schema and at least one database storing data in a second data **storage** schema and the **client request** for **database access** can include a reference to a data storage schema. The invention may also be implemented within a transaction processing system.

Claim

... storage schema and at least one database storing data in a second data storage schema.

4 The database access system of claim 3, wherein the **client request** for database access includes a reference to a data **storage** schema.

5 The **database access** system of claim 4, wherein the connection manager includes means for converting data storage schema requests into references to database connections to databases that store...

...to on-line transaction processing storage.

7 The database access system of claim 6, wherein the second storage schema corresponds to on-line analytical processing **storage** .

8 The **database access** system of claim 3, wherein the distributed computing envirom-nent includes a transaction processing means having a transaction context for registering transaction participants and at least one of the plurality of **clients** participates in a **transaction** .

9 The database access system of claim 8, wherein one or more transaction participants request access to a database storing data in the first data ...transaction participant that has requested a database connection placing
data into the connection;
g) upon closing of the transaction, commitment of the data in the **database** connections by the **transaction** processing system.

22 The **computer** program product of claim 21, wherein at least one database request placed by an object includes a database identifier referring to a database storing data...

18/5,K/44 (Item 34 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00523481 **Image available**
DYNAMICALLY CONFIGURABLE DATA STORAGE AND PROCESSING SYSTEM OPTIMIZED FOR PERFORMING DATABASE OPERATIONS
STOCKAGE DE DONNEES CONFIGURABLE DYNAMIQUEMENT ET SYSTEME DE TRAITEMENT OPTIMISE POUR EFFECTUER DES OPERATIONS AVEC DES BASES DE DONNEES
Patent Applicant/Assignee:
RECURSION DYNAMICS INC,
GELMAN Boris,
KUMETS Alex,
Inventor(s):
GELMAN Boris,
KUMETS Alex,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9954833 A2 19991028
Application: WO 99US8318 19990415 (PCT/WO US9908318)
Priority Application: US 9863085 19980420
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
Main International Patent Class: G06F-017/30
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 21440

English Abstract
The data manipulation portion of a relational database management system (RDBMS) is migrated out of the general purpose computer (GPC) and into a data manipulation subsystem (DMS), where the data manipulation functions are performed at the maximum rate at which data storage devices can provide data. The GPC processing load is dramatically reduced because the GPC is only required to run the query management activities for the RDBMS. The DMS is embodied as a computer subsystem attached to a standard interface of the GPC and provides efficient execution of the data manipulation operations required for database processing. The database is stored on a set of external storage devices attached directly to the DMS. The DMS includes a special-purpose data manipulation processor (DMP) that executes primitives like structured query language commands. The DMS can include several of DMPs operation in parallel. The DMS also includes micro-controller devices, switch devices, interface adapter devices, and a set of memory devices. Each device is optimized for the function it

performs, and efficiently executes a database operation or a portion of the database operation. All the components of the DMS execute simulaneously under the control of the DMP(s) to achieve the desired results.

French Abstract

Selon cette invention, la partie de manipulation des donnees d'un systeme de gestion de bases de donnees relationnelles (RDBMS) , est transferee depuis un ordinateur universel (GPC) vers un sous-systeme de manipulation des donnees (DMS) dans lequel les fonctions de manipulation des donnees s'effectuent a une vitesse maximale a laquelle les dispositifs de stockage de donnees peuvent fournir les donnees. La charge de traitement du GPC s'en trouve radicalement reduite car le GPC n'est utilise que pour les activites de gestion des interrogations pour le compte de RDBMS. Le DMS se presente comme un sous-systeme informatique rattache a une interface standard du GPC. Il execute de maniere efficace les operations de manipulation des donnees necessaires au traitement de la base de donnees. La base de donnees est stockee sur un ensemble de dispositifs de stockage externes, directement rattaches au DMS. Le DMS comprend un processeur specialise de manipulation des donnees (DMP) qui execute des primitives telles que des commandes du langage d'interrogation structure. Le DMS peut comprendre plusieurs DMP fonctionnant en parallele. Le DMS comprend egalement des micro-controleurs, des dispositifs de commutation, des adaptateurs d'interfaces et un ensemble de memoires. Chaque dispositif est optimise pour la fonction qu'il effectue; il execute de maniere efficace une operation relative a la base de donnees ou une partie de cette operation. Tous les composants du DMS fonctionnent simultanement sous le controle d'un ou de plusieurs DMP afin d'arriver aux resultats desires.

Fulltext Availability:
Claims

Claim
... claim 38 wherein the step of executing comprises the steps ofselecting relevant portions of one or more of the data streams flowing from the
data **storage** **devices** based on the **queries** ;
directing the selected portions of the data streams into a memory; and
filtering out **query** results from the **database** by passing the data directed into the memory through the configured circuit implementing the queries. . The method of claim 42 wherein the step of filtering out query results comprises
the steps of:
reading data from the memory;
performing a series of one or more arithmetic and logic ftinctions on the **data** **based**
on the **queries** ;
writing the results of performing the series of the arithmetic and logic:ftinctions back into the memory. . A computer subsystem for implementation of data manipulation **operations** of a relational **database** management system, the subsystem coupled to an input/output interface of a general purpose computer platform, the subsystem comprising:
one or more processors for execution...

...in communication with the data storage device switch;
a controller for execution of control instructions in communication with the processors, the memory interface, the burst **access** memory switch, and the data **storage**
device switch; and
a third memory unit for storing control code in communication with the controller.
45 The apparatus of claim 44, further comprising:
one...

18/5,K/45 **(Item 35 from file: 349)**

00512773

METHOD AND SYSTEM FOR LEASING STORAGE
PROCEDE ET SYSTEME DE LOCATION D'EMPLACEMENTS DE STOCKAGE

Patent Applicant/Assignee:
SUN MICROSYSTEMS INC,
Inventor(s):
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Patent and Priority Information (Country, Number, Date):
Patent: WO 9944125 A1 19990902
Application: WO 99US3394 19990217 (PCT/WO US9903394)
Priority Application: US 9876048 19980226; US 9844923 19980320
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
Main International Patent Class: G06F-009/46
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 9174

English Abstract
A method and system for leasing storage locations in a distributed processing system is provided. Consistent with this method and system, a **client requests access** to **storage** locations for a period of time (lease period) from a server, such as the file system manager. Responsive to this **request** , the **server** invokes a lease period algorithm, which considers various factors to determine a lease period during which time the client may **access** the **storage** locations. After a lease is granted, the server sends an object to the client that advises the client of the lease period and that provides the client with behavior to modify the lease, like canceling the lease or renewing the lease. The server supports concurrent leases, exact leases, and leases for various types of **access** . After all leases to a **storage** location expire, the server reclaims the storage location.

French Abstract
L'invention porte sur un inherent a un systeme de traitement reparti selon lequel un client adresse a un serveur (par exemple un gestionnaire de systeme de fichier) une demande d'acces a des emplacements de stockage pour une periode donnee (de location). En reponse a la demande, le serveur appelle un algorithme de periodes de location qui, ayant pris en compte differents facteurs, determine une periode de location pendant laquelle le client peut avoir acces aux emplacements de stockage. Une fois le bail octroye, le serveur transmet au client un objet l'informant de la periode de location et lui donnant la possibilite de modifier le bail, par exemple de l'annuler ou de le proroger. Le serveur peut traiter les baux concurrents, les baux exacts, ou les baux pour differents types d'acces. A l'expiration du bail le serveur recupere l'emplacement de stockage.

English Abstract
A method and system for leasing storage locations in a distributed processing system is provided. Consistent with this method and system, a **client requests access** to **storage** locations for a period of time (lease period) from a server, such as the file system manager. Responsive to this **request** , the **server** invokes a lease period algorithm, which considers various factors to determine a lease period during which time the client may **access** the **storage** locations. After a lease is granted, the server sends an object to the client that advises the client

of the lease period and that provides...

...to modify the lease, like canceling the lease or renewing the lease. The server supports concurrent leases, exact leases, and leases for various types of **access** . After all leases to a **storage** location expire, the server reclaims the storage location.

18/5,K/48 (Item 38 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00453959 **Image available**
DATA STORAGE CONTROLLER PROVIDING MULTIPLE HOSTS WITH ACCESS TO MULTIPLE STORAGE SUBSYSTEMS
UNITE DE COMMANDE DE STOCKAGE DE DONNEES PERMETTANT L'ACCES DE PLUSIEURS HOTES A PLUSIEURS SYSTEMES DE STOCKAGE
Patent Applicant/Assignee:
ARK RESEARCH CORPORATION,
BERGSTEN James R,
Inventor(s):
BERGSTEN James R,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9844423 A1 19981008
Application: WO 98US4924 19980311 (PCT/WO US9804924)
Priority Application: US 97828888 19970331
Designated States: AL AM AT AT AU AZ BA BB BG BR BY CA CH CN CU CZ CZ DE DE DK DK EE EE ES FI FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SK SL TJ TM TR TT UA UG US UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Main International Patent Class: G06F-012/16
International Patent Class: G06F-13:14
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 12668

English Abstract
A computer network comprises a number of storage controllers (3-1 to 3-M), each coupled to one of a plurality of storage arrays (4-1 to 4-M), each storage array including at least one mass storage device (MSD). Each storage controller may be coupled to at least one host processing system (2-1 to 2-M) and to at least one other storage controller to control access of the host processing systems to the mass storage devices. Multiple copies of data are maintained in storage arrays that are geographically remote to each other, such that any copy can be accessed by any host. Each storage controller includes an interface (14) with a host that emulates a mass storage device independent of the storage device type and an interface (15) with a local storage array that emulates a host independent of the host type. Hosts access stored data using virtual addressing. The storage controllers provide automatic back-up and error correction as well as write protection of back-up copies.

French Abstract
La presente invention concerne un reseau informatique comprenant un certain nombre d'unites de commande (3-1 a 3-M) de stockage, chacune etant couplee a une pluralite d'ensembles de stockage (4-1 a 4-M), lesquels ensembles comprennent au moins un dispositif a memoire de grande capacite (MSD). Chaque unite de commande de stockage peut etre couplee a au moins un systeme de traitement (2-1 a 2-M) hote et a au moins une autre unite de commande de stockage de facon a commander l'acces des systemes de traitement hote aux dispositifs a memoire de grande capacite. Plusieurs copies de donnees sont stockees dans des ensembles de stockage geographiquement distants les uns des autres, de sorte que n'importe quel

hote peut acceder a n'importe quelle copie. Chaque unite de commande de stockage comprend une interface (14) avec un hote qui emule un dispositif a memoire de grande capacite independant du type de dispositif de stockage et une interface (15) avec un ensemble local de stockage qui emule un hote independant du type de l'hote. Des hotes accedent aux donnees stockees au moyen d'un dressage virtuel. Les unites de commande de stockage assurent des sauvegardes et des corrections d'erreur automatiques ainsi qu'une protection en ecriture des copies de sauvegarde.
Fulltext Availability:
Claims

Claim
... of a plurality of different device types.

4 A storage controller according to claim 1, wherein the storage controller is
configured to:
receive from the **host** processing system a **request** specifying a virtual
storage location of data; and
determine a physical storage location of the **data** based on the **request** .

5 A **storage** controller according to claim 4, wherein the virtual storage location corresponds to a plurality of physical storage locations distributed among a plurality of mass storage...

18/5,K/52 (Item 42 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00348334
METHOD AND APPARATUS FOR TRANSACTION PROCESSING IN A DISTRIBUTED DATABASE SYSTEM
TECHNIQUE ET EQUIPEMENT POUR LE TRAITEMENT DE TRANSACTIONS DANS UN SYSTEME REPARTI DE GESTION DE BASE DE DONNEES
Patent Applicant/Assignee:
TELE-COMMUNICATIONS INC,
Inventor(s):
GOLLOB David,
MARUSIN Mark,
RIERDEN William,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9630847 A1 19961003
Application: WO 96US3482 19960315 (PCT/WO US9603482)
Priority Application: US 95405766 19950317
Designated States: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Main International Patent Class: G06F-017/30
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 15998

English Abstract
A subscriber management system includes at least one Data Directory Server (DDS) located between one or more transaction generators and one or more data servers. The DDS efficiently routes transactions and provides data location functions. The DDS provides high data availability, high on-line transaction rates, batch capabilities, scalability and maintainability. In particular, based upon internal rules within the DDS and the particular transaction type, the DDS routes

transactions to the appropriates server(s). Transactions are classified according to where they may be executed. Specifically, transactions may be classified as SPECIFIC, ANY or ALL. A SPECIFIC transaction must be processed at one or more specific servers irrespective of the accompanying arguments. An ANY transaction may be processed at any of the enterprise servers and selection is made randomly. Finally, an ALL transaction requires sequencing through each of the data servers within the enterprise and repetitively performing the transaction.

French Abstract

Le systeme de gestion de lignes d'abonnes selon l'invention comprend au moins un serveur de repertoire de donnees (DDS) situe entre un ou plusieurs generateurs transactionnels et un ou plusieurs serveurs de donnees. Le DDS achemine efficacement les transactions et assure les fonctions de reperage des donnees. Le DDS offre une grande disponibilite de donnees, des debits eleves de transactions en ligne, des capacites de traitement par lots, la possibilite de mise a l'echelle et la facilite de maintenance. En particulier, compte tenu des regles propres au DDS et du type particulier de la transaction, le serveur de repertoire de donnees achemine les transactions vers le ou les serveurs approprie(s). Les transactions sont classees en fonction de l'endroit ou elles peuvent etre executees. Plus precisement, les transactions peuvent etre classees sous l'une des rubriques suivantes: SPECIFIQUE, A VOLONTE ou TOUS. Une transaction classee SPECIFIQUE doit etre traitee au niveau d'un ou plusieurs serveurs specifiques, independamment des arguments dont elle est assortie. Une transaction classee A VOLONTE doit etre traitee au niveau de n'importe quel serveur d'entreprise, et la selection se fait de maniere aleatoire. Enfin, une transaction classee TOUS exige aussi bien le traitement sequentiel, c'est-a-dire le passage par chaque serveur au sein de l'entreprise, que l'execution repetee de la transaction.

Fulltext Availability:
Claims

Claim
... said data servers and said data
directory servers comprise open servers.

13 A distributed database system for processing database transactions on data comprising:
I 0 **transaction** generating means for generating said database **transactions** ;
a plurality of data **storage** **devices** for **storing** said data and **allowing**
read and write access to said data;
routing means for routing said **database** **transactions** for execution
5 on a particular one or more of said data storage devices;
cross reference means for storing a rules base implemented by said routing means;
a first transmission means for transmitting said **database** **transactions** to said routing means; and
a second transmission means for transmitting said routed **database** **transactions** to said data **storage** **devices** .
14 The system of claim 13 further comprising a third transmission means for transmitting said rules base from said cross reference means to said
routing...

18/5,K/53 (Item 43 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00347150 **Image available**
COMPUTER SYSTEM AND COMPUTER-IMPLEMENTED PROCESS FOR REMOTE EDITING OF COMPUTER FILES
SYSTEME INFORMATIQUE ET PROCESSUS INFORMATISE D'EDITION A DISTANCE DE FICHIERS INFORMATIQUES
Patent Applicant/Assignee:

MICROSOFT CORPORATION,
Inventor(s):
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AMSTEIN Peter R,
DRELLISHAK Scott F,
FORGAARD Randy J,
SCHULERT Andrew J,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9629663 A1 19960926
Application: WO 96US3650 19960318 (PCT/WO US9603650)
Priority Application: US 95406360 19950317; US 95566281 19951201
Designated States: JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Main International Patent Class: G06F-017/30
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 22691

English Abstract
A client/server computer system for remote editing of document objects stored on the server includes a client computer connected to a server computer via a communication channel over which messages are sent in a communication protocol. Typically, the client computer has an operating system with the first file name space and the server computer has an operating system with a second file name space and the first file name space does not include names of files which map to names of files in the second file name space. The connection is preferably a TCP/IP connection providing data transport according to TCP/IP. Messages in the HTTP protocol are preferably used. The client computer sends request messages to the server. A request message may indicate a request for either retrieval or storage of a document object, such as an HTML document or script program. The server receives the request messages and processes them to either store a document object or retrieve a document object and return it to the client in a response message. When the server is an HTTP server, the request messages from the client are processed by a single control script. The messages from the client indicate a desired document object and the action to be performed.

French Abstract
La presente invention concerne un systeme informatique de type client/serveur permettant l'edition a distance d'objets documentaires conserves par le serveur. Ce systeme comporte un ordinateur client connecte a un ordinateur serveur via un canal de communication permettant l'envoi de messages selon un protocole de communication. Generalement, l'ordinateur client dispose d'un systeme d'exploitation pourvu d'une zone "nom de premier fichier", et l'ordinateur serveur dispose d'un systeme d'exploitation pourvu d'une zone "nom de second fichier", sa zone "nom de premier fichier" ne comportant aucun nom de fichier correspondant aux noms des fichiers stockes dans la zone "nom de second fichier". La connexion est de preference une connexion en TCP/IP assurant le transport des donnees en protocole TCP/IP. On prefere que les messages soient en protocole HTTP c'est-a-dire "Hypertext Transfer Protocol" (protocole de transfert Hypertexte). L'ordinateur client envoie au serveur des messages de requete. Un message de requete peut comporter une requete soit d'extraction, soit de stockage d'un objet documentaire tel qu'un document HTML c'est-a-dire "Hypertext Markup Language" (langage de marquage Hypertexte), ou tel qu'un programme a base de scripts (de type Unix). Le serveur recoit les messages de requetes et les traite en vue, soit de stocker un objet documentaire, soit d'extraire un objet documentaire et de le rendre au client dans un message de reponse. Lorsque le serveur est un serveur HTTP, les messages de requetes du client sont traites au moyen d'un seul script de commande. Les messages en provenance du client indiquent un objet documentaire souhaite et l'operation a executer.

Fulltext Availability:
Claims

Claim

... server. wherein the response message includes the document object, and an output

providing the document object to the memory of the editing system. and a **store request** message **processor** . connected to **access** the memory of the editing system. and having an input connected to receive an indication of the location on the server for storing the document...

20/5,K/16 (Item 16 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00961342

Information processors having an agent function and storage mediums which contain processing programs for use in the information processor

Informationsprozessoren mit Agent-Funktion und Speichermedien, die Programme zum Gebrauch im Informationsprozessor enthalten

Processeurs informatiques avec fonction d'agent et moyens de stockage qui contiennent des programmes destines a etre utilises dans ces processeurs informatiques

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LEGAL REPRESENTATIVE:
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PATENT (CC, No, Kind, Date): EP 872806 A1 981021 (Basic)
APPLICATION (CC, No, Date): EP 98106823 980415;
PRIORITY (CC, No, Date): JP 10043497 970417; JP 10187697 970418
DESIGNATED STATES: DE; FR; GB; IT; NL; SE
INTERNATIONAL PATENT CLASS: **G06F-017/60**
CITED PATENTS (EP A): XP 333438 0; XP 530664 0; XP 2072912 0

CITED REFERENCES (EP A):
TOSHIHIRO IDE ET AL: "AN INTELLIGENT NETWORK SERVICE PROTOTYPE USING KNOWLEDGE PROCESSING" PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON TOOLS FOR ARTIFICIAL INTELLIGENCE, SAN JOSE, NOV. 5 - 8, 1991, no. CONF. 3, 10 November 1991, INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, pages 445-448, XP000333438
BOCIONEK S: "SOFTWARE SECRETARIES: LEARNING AND NEGOTIATING PERSONAL ASSISTANTS FOR THE DAILY OFFICE WORK" PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON SYSTEMS, MAN, AND CYBERNETICS, SAN ANTONIO, OCT. 2 - 5, 1994, vol. VOL. 1, 2 October 1994, INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, pages 7-12, XP000530664
ANONYMOUS: "Visual Dialog Showing Speech Interaction with an Intelligent Agent" IBM TECHNICAL DISCLOSURE BULLETIN, vol. 39, no. 1, January 1996, NEW YORK, US, pages 237-240, XP002072912;

ABSTRACT EP 872806 A1

The subject of the present invention is to cause an agent to smoothly respond to an user's request to utilize an agent function of accessing software more effectively than in the prior art. An agent computer block (16) selects an appropriate one of a plurality of agents corresponding to an accessing user on the basis of an agent table where the plurality of agents are recorded from voice data provided by an input/output interface computer block (15), reads out from a **storage** device (17) agent set information on the selected agent, transfers this set information to the input/output interface computer block (15), displays the selected agent's peculiar figure (mainly, face) on a display device (13) in accordance with the agent set information, and outputs from a voice output device (11) a message in the agent's peculiar voice.

ABSTRACT WORD COUNT: 138

LEGAL STATUS (Type, Pub Date, Kind, Text):
Examination: 011114 A1 Date of dispatch of the first examination report: 20010928
Application: 981021 A1 Published application (A1with Search Report ;A2without Search Report)
Examination: 981021 A1 Date of filing of request for examination: 980415
Change: 990630 A1 Designated Contracting States (change)
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language Update Word Count

CLAIMS A (English) 9843 2154
SPEC A (English) 9843 10293
Total word count - document A 12447
Total word count - document B 0
Total word count - documents A + B 12447

INTERNATIONAL PATENT CLASS: **G06F-017/60**

...ABSTRACT agent table where the plurality of agents are recorded from voice data provided by an input/output interface computer block (15), reads out from a **storage** device (17) agent set information on the selected agent, transfers this set information to the input/output interface computer block (15), displays the selected agent...

...SPECIFICATION agent's voice from the voice output device 11 a message including a greeting, self-introduction and a request to the user. When the agent **computer** block 16 then receives a **request** from the input/output interface **computer** block 15, it analyzes the meaning of the request, determines whether there is a request to report a schedule to the user or a **request** to **access** a **server** .
The **storage** device 17 includes a storage medium 18 composed of a magnetic or optical recording medium or semiconductor memory provided fixedly or removably in the storage...

20/5,K/23 (Item 23 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00605929
Method of and apparatus for providing a client/server architecture.
Verfahren und Anordnung zur Bereitstellung einer Klient-Server-Architektur.
Procede et dispositif pour produire une architecture du type "client-server".
PATENT ASSIGNEE:
INTERNATIONAL BUSINESS MACHINES CORPORATION, (200125), Old Orchard Road, Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB)
INVENTOR:
Shriver, David I., 2702 Ansley Court, Euless, TX 76039, (US)
LEGAL REPRESENTATIVE:
de Pena, Alain (15151), Compagnie IBM France Departement de Propriete Intellectuelle, F-06610 La Gaude, (FR)
PATENT (CC, No, Kind, Date): EP 598673 A1 940525 (Basic)
APPLICATION (CC, No, Date): EP 93480164 931019;
PRIORITY (CC, No, Date): US 978647 921119
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: **G06F-009/46**

ABSTRACT EP 598673 A1
An improved client / server architecture in which a server runs as part of the client's task, subtask or process when processing a request for a client. The present invention causes the server, while still appearing logically and functionally the same to the client, to temporarily run as an extension of the client, while the server is servicing a request for the client. This may be accomplished by preserving the state of the server (by saving the registers and critical **storage** pointers) at the point that the server is ready to accept a new work request. This state information for the server may be accessed and used later by the client to transfer control to the server code, to resume the server's operation. The client's request may then be passed as arguments (parameters) on the call. Unlike message passing, this does not necessarily involve data transfer, as only the address of the request data may be passed. (see image in original document)
ABSTRACT WORD COUNT: 164

LEGAL STATUS (Type, Pub Date, Kind, Text):
Application: 940525 A1 Published application (A1with Search Report ;A2without Search Report)

Examination: 941123 A1 Date of filing of request for examination: 940927
Withdrawal: 961030 A1 Date on which the European patent application was deemed to be withdrawn: 960501
*Assignee: 970205 A1 Applicant (transfer of rights) (change): International Business Machines Corporation (200120) Old Orchard Road Armonk, N.Y. 10504 (US) (applicant designated states: DE;FR;GB)
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF2	306
SPEC A	(English)	EPABF2	2453
Total word count - document A			2759
Total word count - document B			0
Total word count - documents A + B			2759

INTERNATIONAL PATENT CLASS: **G06F-009/46**

...ABSTRACT server is servicing a request for the client. This may be accomplished by preserving the state of the server (by saving the registers and critical **storage** pointers) at the point that the server is ready to accept a new work request. This state information for the server may be accessed and...

...SPECIFICATION the program (usually returning to the caller).
Using a client / server computing structure, what is described as the calling program above, is now called a **client** . The program that processes the **request** of a **client** is called a server. Programs that make up a client / server computing system, are organized differently than the conventional program structure. Rather than a client directly calling a server, a system routine is called to pass a **request** to a **server** . Another major difference is that the **server** programs do not logically **function** as the sub-programs of their clients, but are rather separate, usually long-running, concurrent programs. The major distinctions between conventional program/sub-program structure and client/server program structure are that : 1) the life of a server program usually lasts across multiple **client** **requests** ; and 2) A **server** may use common, persistent storage for its working **storage** . That is each **request** received by a **server** does not require its own separate working storage, as the **server** serializes and controls proper **access** to its own working storage.
The standard flow of a server computer program is :
1) Perform one-time initialization (usually the allocation of working storage...

20/5,K/24 (Item 24 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00362434
Remote boot
Fern-Urlader
Chargement initial a distance
PATENT ASSIGNEE:
DIGITAL EQUIPMENT CORPORATION, (313081), 111 Powdermill Road, Maynard Massachusetts 01754-1418, (US), (applicant designated states: DE;FR;GB;NL)
INVENTOR:
Flaherty, James E., 168 White Pond Road, Hudson Massachusetts 01749, (US)
LEGAL REPRESENTATIVE:
Goodman, Christopher et al (31122), Eric Potter & Clarkson St. Mary's Court St. Mary's Gate, Nottingham NG1 1LE, (GB)
PATENT (CC, No, Kind, Date): EP 358292 A2 900314 (Basic)
EP 358292 A3 900829
EP 358292 B1 970910
APPLICATION (CC, No, Date): EP 89302132 890303;

PRIORITY (CC, No, Date): US 240955 880906
DESIGNATED STATES: DE; FR; GB; NL
INTERNATIONAL PATENT CLASS: **G06F-009/445** ; **G06F-015/16** ; **G06F-009/44**
ABSTRACT EP 358292 A2

A system and method of down loading, over a network, operating systems or other executable programs to a computer which does not have a boot device or other device containing the executable program. Down loading is accomplished without modification of the loadable image. The computer has a network interface which requests a minimum-boot program be transferred from a host computer on the network. The minimum-boot program, when executed, establishes a logical connection to a **disk** server on the network and allows the requesting computer to treat the **disk** server as a local boot device.

ABSTRACT WORD COUNT: 98

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application:	900314	A2	Published application (Alwith Search Report ;A2without Search Report)
Examination:	900314	A2	Date of filing of request for examination: 890316
Search Report:	900829	A3	Separate publication of the European or International search report
Examination:	941214	A2	Date of despatch of first examination report: 941028
Grant:	970910	B1	Granted patent
Oppn None:	980902	B1	No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9709W1	1415
CLAIMS B	(German)	9709W1	1264
CLAIMS B	(French)	9709W1	1708
SPEC B	(English)	9709W1	3551
Total word count - document A			0
Total word count - document B			7938
Total word count - documents A + B			7938

INTERNATIONAL PATENT CLASS: **G06F-009/445** ...

... **G06F-015/16** ...

... **G06F-009/44**

...ABSTRACT a minimum-boot program be transferred from a host computer on the network. The minimum-boot program, when executed, establishes a logical connection to a **disk** server on the network and allows the requesting computer to treat the **disk** server as a local boot device. ...

...SPECIFICATION the network. Programs were developed which simplified access to the files on the disks of another computer system. Eventually the concept evolved to assign special **functions** to certain **computers** on the network. For example, one computer would assign logical names to each physical device accessible to the network. In that way a user instead...

...specified system can simply request the file using some logical name, and a computer on the network which was designated to do the correlation then **requests** the file on the specified **disk** and system, treating the disk on that system as if it were the user's local disk. This translation of logical names to physical devices is transparent to the user. The computer doing the translating in this case is termed a **disk** or file **server** . Other **server** **functions** have been defined, such as a print **server** , which **allows** a file to be printed without specifying to which computer the printer is attached.

It is also possible to assign a user to a disk...

20/5,K/25 (Item 25 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00202687

Process transparent multi storage mode data transfer and buffer control.

Datentransfer und Puffersteuerung mit mehrfachen prozesstransparenten Speicherbetriebsarten.

Transfert de donnees et commande de memoire tampon a plusieurs modes de mise en memoire, transparent au processus.

PATENT ASSIGNEE:
International Business Machines Corporation, (200120), Old Orchard Road, Armonk, N.Y. 10504, (US), (applicant designated states: BE;CH;DE;FR;GB;IT;LI;NL;SE)
INVENTOR:
Schwane, Walter Henry, Route 1 Box 131A, Kasson, MN 55944, (US)
Ziecina, Frederick Joseph, 703 SW 20 Avenue, Rochester, MN 55902, (US)
LEGAL REPRESENTATIVE:
Vekemans, Andre (18921), Compagnie IBM France Departement de Propriete Intellectuelle, F-06610 La Gaude, (FR)

PATENT (CC, No, Kind, Date): EP 205945 A2 861230 (Basic)
EP 205945 A3 890531
EP 205945 B1 930818
APPLICATION (CC, No, Date): EP 86107010 860523;
PRIORITY (CC, No, Date): US 745753 850617
DESIGNATED STATES: BE; CH; DE; FR; GB; IT; LI; NL; SE
INTERNATIONAL PATENT CLASS: **G06F-015/16** ; **G06F-009/46**
CITED PATENTS (EP A): WO 8404188 A; WO 8404188 A; EP 132158 A; EP 132158 A; EP 193933 A; FR 2472234 A

ABSTRACT EP 205945 A2

An interprocess communication facility in a processor system provides for communication of data between at least two processes. The facility supports a plurality of different data transfer modes which are provided by **storage** management services of the processor or processors. A process interface provides a common interface for each communicating process to select data transfer modes independently of the data transfer mode chosen by the other communicating process. A data access control function is coupled to the process interface and to the **storage** management services. The data access control function controls the use of the **storage** management services as a function of the transfer modes chosen by the communicating processes. It is transparent to the processes as to which transfer mode was chosen by each other.

ABSTRACT WORD COUNT: 130

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application:	861230	A2	Published application (A1with Search Report ;A2without Search Report)
Examination:	870624	A2	Date of filing of request for examination: 870422
Search Report:	890531	A3	Separate publication of the European or International search report
Examination:	910911	A2	Date of despatch of first examination report: 910730
Change:	920115	A2	Representative (change)
Change:	930127	A2	Representative (change)
Grant:	930818	B1	Granted patent
Lapse:	940420	B1	Date of lapse of the European patent in a Contracting State: SE 930818
Oppn None:	940810	B1	No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	911
CLAIMS B	(German)	EPBBF1	895
CLAIMS B	(French)	EPBBF1	1105
SPEC B	(English)	EPBBF1	10464

Total word count - document A 0

Total word count - document B 13375
Total word count - documents A + B 13375

INTERNATIONAL PATENT CLASS: **G06F-015/16** ...

... **G06F-009/46**

...ABSTRACT system provides for communication of data between at least two processes. The facility supports a plurality of different data transfer modes which are provided by **storage** management services of the processor or processors. A process interface provides a common interface for each communicating process to select data transfer modes independently of the data transfer mode chosen by the other communicating process. A data access control function is coupled to the process interface and to the **storage** management services. The data access control function controls the use of the **storage** management services as a function of the transfer modes chosen by the communicating processes. It is transparent to the processes as to which transfer mode...

...SPECIFICATION are data movers. They are responsible for transferring bytes of data from one place to another and do not understand the meaning of the information **being** moved. Thus, **storage** 20 **in processor** A is coupled to **the** transport mechanism 38 as represented **by** a line 46 **and storage** 25 **in processor** B is coupled **to** transport mechanism 40 as represented by a line 48 to permit information transfers directly by the transport mechanisms 38, 40.

The IPCF of the process...receives a work request and a sender when it returns data to the requestor.

A data access control function is defined in IPCF at each **processor** and provides **location** transparency with the defined data transfer modes. When data is sent from a sender in MOVE mode, the receiver gets a copy of the information...

...the data access control function passes a pointer to data and the data is not moved. When the processes do not have access to shared **storage** , the data access control **function** provides a copy of the data in storage accessible to the receiver of the data.

FREEBUF allows a sender of data to pass responsibility for...

20/5,K/47 (Item 22 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00745484 **Image available**
TIGHTLY-COUPLED DISK-TO-CPU STORAGE SERVER
SERVEUR DE STOCKAGE A DISQUES-UCT JUMELES
Patent Applicant/Assignee:
DIVA SYSTEMS CORPORATION, 800 Saginaw Drive, Redwood City, CA 94063, US, US (Residence), US (Nationality)
Inventor(s):
TAYLOR Clement G, 215 Hampshire Drive, Plainsboro, NJ 08536, US
CHIN Danny, 4 Strathmore Place, Princeton Junction, NJ 08550, US
LERMAN Jesse S, 141 Finnegans Lane, Kendall Park, NJ 08016, US
ZACK Steven, 1308 Oxmead Road, Burlington, NJ 08016, US
ASHLEY William, 1155-C LaRochelle Terrace, Sunnyvale, CA 94089, US
Legal Representative:
MOSER Raymond R, Thomason Moser & Patterson, LLP, 2-40 Bridge Avenue, P.O. Box 8160, Red Bank, NJ 07701, US
Patent and Priority Information (Country, Number, Date):
Patent: WO 200058856 A1 20001005 (WO 0058856)
Application: WO 2000US8410 20000330 (PCT/WO US0008410)
Priority Application: US 99127116 19990331; US 99363670 19990729
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: **G06F-015/16**
International Patent Class: **G06F-013/00**
Publication Language: English
Filing Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 5022

English Abstract
A **storage** server (110) for efficiently retrieving data from a plurality of **disks** (212) in response to user access requests. The server comprises a plurality of processors (302) coupled to disjoint subsets of **disks** , and a custom non-blocking packet switch (220) for routing data from the processors to users. By tightly coupling the processors to **disks** and employing an application-specific switch, congestion and **disk** scheduling bottlenecks are minimized. By making efficient use of bandwidth, the architecture is also capable of receiving real-time data streams from a remote source and distributing these data streams to requesting users. The architecture is particularly well suited to video-on-demand systems in which a video server stores a library of movies and users submit requests to view particular movies.

French Abstract
L'invention concerne un serveur de stockage (110) servant a extraire efficacement des donnees de plusieurs disques (212) en reponse a des demandes d'acces provenant d'usagers. Le serveur comporte plusieurs processeurs (302) relies a des sous-ensembles disjoints de disques, et un commutateur de paquets (220) sans blocage sur mesure pour acheminer les donnees des processeurs vers les usagers. Le jumelage processeurs-disques et l'utilisation d'un commutateur propre a une application permet de reduire au minimum l'encombrement et les goulots d'etranglement d'allocation de disque. L'utilisation efficace de la bande passante permet egalement a l'architecture de recevoir des flux de donnees en temps reel provenant d'une source eloignee, et de distribuer ces flux de donnees a des usagers demandeurs. L'architecture convient particulierement bien pour des systemes de video a la demande, dans lesquels un serveur de videos stocke une bibliotheque de films et des usagers soumettent des demandes pour voir des films voulus.

Legal Status (Type, Date, Text)
Publication 20001005 A1 With international search report.
Publication 20001005 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.
Examination 20010315 Request for preliminary examination prior to end of 19th month from priority date

Main International Patent Class: **G06F-015/16**
International Patent Class: **G06F-013/00**
Fulltext Availability:
Detailed Description

English Abstract
A **storage** server (110) for efficiently retrieving data from a plurality of **disks** (212) in response to user access requests. The server comprises a plurality of processors (302) coupled to disjoint subsets of **disks** , and a custom non-blocking packet switch (220) for routing data from the processors to users. By tightly coupling the processors to **disks** and employing an application-specific switch, congestion and **disk** scheduling bottlenecks are minimized. By making efficient use of bandwidth, the architecture is also capable of receiving real-time data streams from a remote source...

Detailed Description

... users to efficiently retrieve
information from large volumes of data stored on a
plurality of disks. For example, a video-on-demand server
is a **storage server** that accepts user **requests** to view a
particular movie from a video library, retrieves the
20 requested program from disk, and delivers the program to
the appropriate user(s). In order to provide high
performance, storage servers may employ a plurality of
processors connected to the disks, **allowing** the **server** to
service multiple user **requests** simultaneously. In such
25 multi-processor **servers** , **processors** issue **commands** to any
of the **disks** , and a multi-port switch connecting the
processors to the **disks** routes these **commands** to the
appropriate **disk** . Data retrieved from disk is similarly
routed back to the appropriate processor via the switch.

30 Such servers use non-deterministic data routing channels
for...

20/5,K/49 (Item 24 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00738044 **Image available**
PROXY SERVER AUGMENTING A CLIENT REQUEST WITH USER PROFILE DATA
SERVEUR MANDATAIRE COMPLETANT UNE DEMANDE DE CLIENT A L'AIDE DE DONNEES DU PROFIL DE L'UTILISATEUR
Patent Applicant/Assignee:
AMERICA ONLINE INC, 22000 AOL Way, Dulles, VA 20166, US, US (Residence), US (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
HENDREN C Hudson III, 1340 Old Grade Road, Strasburg, VA 22657, US, US (Residence), US (Nationality), (Designated only for: US)
Legal Representative:
HAYDEN John F (et al) (agent), Fish & Richardson, P.C., 601 Thirteenth Street N.W., Washington, DC 20005, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200051031 A1 20000831 (WO 0051031)
Application: WO 2000US4698 20000225 (PCT/WO US0004698)
Priority Application: US 99258242 19990226
Parent Application/Grant:
Related by Continuation to: US 99258242 19990226 (CIP)
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: **G06F-017/30**
Publication Language: English
Filing Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 5596

English Abstract
A **proxy** server includes a database, a network interface, and a processor. The database includes records storing user profile information. The network interface is coupled to a network to exchange data with a client computer and with a target server. The processor is operatively coupled to the network interface, the database, and to a memory. The memory includes executable instructions for causing the processor to receive a data request from a client computer at the network interface, augment the data request by adding user profile information,

and send the augmented data request to the network interface for delivery to the target server. A data transfer method performed at a **proxy** server includes intercepting a data request directed from a client computer to a target server. The intercepted data request is then augmented at the **proxy** server by adding user profile information and sent to a target server.

French Abstract

L'invention concerne un serveur mandataire comprenant une base de donnees, une interface de reseau, et un processeur. Cette base de donnees contient des enregistrements stockant des renseignements sur le profil de l'utilisateur. Ladite interface du reseau est couplee a un reseau afin d'echanger des donnees avec un ordinateur de client et avec un serveur cible. Ledit processeur est couple de facon fonctionnelle a l'interface de reseau, a la base de donnees, et a une memoire. Cette memoire contient des instructions executables permettant au processeur de recevoir une demande de donnees d'un ordinateur de client au niveau de l'interface du reseau, d'enrichir la demande de donnees en ajoutant des renseignements sur le profil de l'utilisateur, et d'envoyer la demande de donnees enrichie a l'interface du reseau afin de l'acheminer vers le serveur cible. Un procede de transfert de donnees effectue au niveau d'un serveur mandataire consiste a intercepter une demande de donnees dirigee d'un ordinateur de client vers un serveur cible. La demande de donnees interceptee est ensuite completee au niveau du serveur mandataire en ajoutant des renseignements sur le profil d'utilisateur, puis est envoyee au serveur cible.

Legal Status (Type, Date, Text)

Publication	20000831	A1 With international search report.
Publication	20000831	A1 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.
Examination	20001123	Request for preliminary examination prior to end of 19th month from priority date
Correction	20010913	Corrections of entry in Section 1: under (63) replace the existing text by "US, 09/258,242 (CIP)Filed on 26 February 1999 (26.02.99)"
Republication	20010913	A1 With international search report.

Main International Patent Class: **G06F-017/30**

Fulltext Availability:

Detailed Description

English Abstract

A **proxy** server includes a database, a network interface, and a processor. The database includes records storing user profile information. The network interface is coupled to a...

...profile information, and send the augmented data request to the network interface for delivery to the target server. A data transfer method performed at a **proxy** server includes intercepting a data request directed from a client computer to a target server. The intercepted data request is then augmented at the **proxy** server by adding user profile information and sent to a target server.

Detailed Description

PROXY SERVER AUGMENTING A **CLIENT** **REQUEST** WITH USER PROFILE DATA

BACKGROUND

Client computers can communicate with a **server** to remotely **access** information stored at the **server** . The transfer of information between the server and client computers may be provided using standard protocols and software applications. For example, a hypertext markup language... bridge, router, or other interconnection device instead of, or in addition to, proxy server 117.

A server 131-133 may be configured to receive data **requests** from multiple **client** **computers** I I 1-1 13 which may be generated by multiple different users of those client computers. Access to particular server computers 131-133 may...

...I 1 7 receives the HTTP request 200, the proxy 1 17 can modify the request 200 to include user profile information. To modify the **request** 200, the **proxy server** 1 17 first determines a user associated with the request.

To determine the user associated with a HTTP request, a proxy server may use a...

20/5,K/51 (Item 26 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00541110 **Image available**
HIERARCHICAL DATA STORAGE MANAGEMENT
GESTION HIERARCHIQUE DE STOCKAGE DE DONNEES
Patent Applicant/Assignee:
IMATION CORP,
Inventor(s):
SITKA Larry R,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200004483 A2 20000127 (WO 0004483)
Application: WO 99US16051 19990715 (PCT/WO US9916051)
Priority Application: US 9892853 19980715
Designated States: JP AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Main International Patent Class: **G06F-017/30**
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 17927

English Abstract
A system and method for managing the **storage** of files within an HSM system incorporate an architecture and methodology that facilitate the **storage** and retrieval of large image files as part of an overall image processing workflow. In particular, the system and method may find ready application in a workflow that involves the processing of groups of images associated with particular customers, projects, or transactions, and may act as a **storage** server for a client application that implements the workflow. The system and method may be useful, for example, in handling the **storage** of images uploaded from scanned photographic film, or digital images submitted to a photo-processing shop by amateur or professional photographers. In this case, the client application can be a photo-processing application that could provide for various media formats, sizes, and quantities of image reproductions for a consumer. As another example, the system and method may be useful in handling the **storage** of medical diagnostic images associated with a particular medical patient or study. In this case, the client application could be a picture archival communication system (PACS) that manages the archival of imagery for viewing by physicians. Further, the system and method may be useful in handling the **storage** of images associated with particular printing jobs, e.g., for publishers, advertising customers, and the like. In this case, the client application could be a digital prepress workflow application.
French Abstract
L'invention concerne un systeme et un procede permettant de stocker des fichiers dans un systeme de gestion hierarchique de stockage de donnees, comprenant une architecture et une methodologie qui facilitent le stockage et l'extraction de grands fichiers d'images, comme etant une partie du deroulement des travaux de traitement global d'images. Ce systeme et ce procede peuvent, en particulier, trouver une application prete dans un deroulement des travaux impliquant le traitement de groupes d'images associees a des utilisateurs, des projets ou des transactions particuliers, et peuvent agir comme serveur de stockage pour une application client qui met en oeuvre le deroulement des travaux. Le systeme et le procede peuvent egalement etre utiles pour manipuler le stockage d'images telechargees a partir d'un film photographique balaye,

ou d'images numeriques soumises a un atelier de traitement de photo par des photographes amateurs ou professionnels. Dans ce cas, l'application client peut etre une application de traitement de photo, qui pourrait fournir differents formats et tailles de support, et des quantites de reproductions d'images a un consommateur. Dans un autre exemple, le systeme et le procede peuvent etre utiles pour manipuler le stockage d'images medicales de diagnostic, associees a un patient ou une etude particulier. Dans ce cas, l'application client pourrait etre un systeme de communication d'archives d'images (PACS) qui gere les archives d'imagerie pour consultation par des medecins. En outre, ce systeme et ce procede peuvent etre utiles pour manipuler le stockage d'images associees a des travaux d'impression particuliers, par exemple pour des editeurs, des publicistes, ou analogue. Dans ce cas, l'application client pourrait etre une application de deroulement de travaux de pre-presse numerique. esse numerique.

Main International Patent Class: **G06F-017/30**
Fulltext Availability:
Detailed Description

English Abstract
A system and method for managing the **storage** of files within an HSM system incorporate an architecture and methodology that facilitate the **storage** and retrieval of large image files as part of an overall image processing workflow. In particular, the system and method may find ready application in a workflow that involves the processing of groups of images associated with particular customers, projects, or transactions, and may act as a **storage** server for a client application that implements the workflow. The system and method may be useful, for example, in handling the **storage** of images uploaded from scanned photographic film, or digital images submitted to a photo-processing shop by amateur or professional photographers. In this case, the...

...various media formats, sizes, and quantities of image reproductions for a consumer. As another example, the system and method may be useful in handling the **storage** of medical diagnostic images associated with a particular medical patient or study. In this case, the client application could be a picture archival communication system (PACS) that manages the archival of imagery for viewing by physicians. Further, the system and method may be useful in handling the **storage** of images associated with particular printing jobs, e.g., for publishers, advertising customers, and the like. In this case, the client application could be a...

Detailed Description
... the DSM Server host even if the media resides remotely.

Volume Server process 18 executes on each host having drives that handle DSM volumes. The **roles** of the Volume **Server** 18 are to: (1) issue **device** -oriented to **commands** such as mount the file system and lock a volume in a **drive** ; (2) perform volume-oriented **commands** such as (a) partition and format a volume, (b) read and write the volume label, (c) return volume statistics from the operating system, such as...

...perform 1/0 control such as rewind or position; and (3) set up a Data Mover 20, 21 for 1 5 each concurrent file-related **operation** . For random-access devices that allow concurrent **operations** , such as hard **disk** and MO, a Data Mover would be established for each concurrent **operation** .

There is one Volume **Server** process 18 per host that controls DSM drives.

The Volume Server 18 has a well-known port that the DSM Server 14 can use to...

20/5,K/52 (Item 27 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00535033 **Image available**

SCALABLE PROXY SERVERS WITH PLUG IN FILTERS

SERVEURS DE PROCURATION RECONFIGURABLES EQUIPES DE FILTRES REALISES SOUS LA FORME DE MODULE A INSERTION AUTOMATIQUE

Patent Applicant/Assignee:
SUN MICROSYSTEMS INC,
Inventor(s):
NAGAR Vivek,
SINGH Inderjeet,

Patent and Priority Information (Country, Number, Date):
Patent: WO 9966385 A2 19991223
Application: WO 99US13876 19990618 (PCT/WO US9913876)
Priority Application: US 9889995 19980619
Designated States: JP AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Main International Patent Class: **G06F**
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 6518

English Abstract
A **proxy** server operative to accept plug-in filters to perform forward and reverse filtering between a client process and a server process. In accordance with one aspect of the invention, a method of filtering information includes the steps of receiving a request by the **proxy** server from a client. The **proxy** server identifies a Uniform Resource Locator (URL) of a server process in the request and compares that URL against filter rules previously defined to the system. In the event the URL satisfies one of the filter rules, a filter servlet associated with the satisfied filter rule is used to filter the requested information. A filter servlet is a set of instructions that, when executed, filters the information. The filtered request is then used to retrieve information from a server process. Similarly, the same filtering process may be performed on a response from the server process destined for a client process.

French Abstract
L'invention concerne un serveur de procuration capable d'accepter des filtres realises sous la forme de modules a insertion automatique pour realiser un filtrage vers l'amont comme vers l'aval entre un processus client et un processus serveur. Selon un des aspects de l'invention, a la reception d'une demande client par un serveur de procuration, celui-ci recherche dans la demande une URL (Uniform Resource Locator) d'un processus serveur et la compare aux regles de filtrage prealablement definies pour le systeme. Des que l'URL satisfait a l'une des regles de filtrage, le miniserveur filtreur associe a la regle de filtrage prise en compte intervient pour filtrer des informations demandees. Un miniserveur filtreur est un ensemble d'instructions qui, a l'execution, filtre les informations. La demande ainsi filtree sert alors a al recherche d'informations depuis le processus serveur. Ainsi, le meme processus de filtrage peut s'appliquer a une reponse provenant du processus serveur destinee a un processus client.

Main International Patent Class: **G06F**
Fulltext Availability:
Detailed Description

English Abstract
A **proxy** server operative to accept plug-in filters to perform forward and reverse filtering between a client process and a server process. In accordance with one aspect of the invention, a method of filtering information includes the steps of receiving a request by the **proxy** server from a client. The **proxy** server identifies a Uniform Resource Locator (URL) of a server process in the request and compares that URL against filter rules previously defined to the...

Detailed Description
... servers 228 and 230 each contain a filter 232, 234. By using filter 232, proxy server 228 performs forward filtering. "Forward filtering" refers to the **proxy server** filtering **requests** originating from within Intranet 202 that are destined for Internet 204 as well as responses to these **requests** . For example, **client** program 216 on computer 206 may attempt to **access** a **server** program 220 on computer 2 1 0. In this situation, filter 232 indicates the outbound requests and the inbound responses that are allowed to flow...

...and systems consistent with the present invention includes blocking portions of a web site from being accessed or blocking the entire web site from being **accessed** .

By using filter 234, proxy **server** 230 can perform reverse filtering. "Reverse filtering" refers to the **proxy server** filtering **requests** originating from Internet 204 that are destined for Intranet 202 as well as the responses to these **requests** . For example, a **client** program 222 on computer 212 may attempt to **access** a **server** program 218 on computer 208. In this situation, proxy server 230 utilizes filter 234 to determine which requests and responses are allowed to pass through...

20/5,K/53 (Item 28 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00502945 **Image available**
STORAGE ROUTER AND METHOD FOR PROVIDING VIRTUAL LOCAL STORAGE
ROUTEUR DE MEMOIRE ET PROCEDE ASSURANT UN STOCKAGE LOCAL VIRTUEL
Patent Applicant/Assignee:
CROSSROADS SYSTEMS INC,
Inventor(s):
HOESE Geoffrey B,
RUSSELL Jeffry T,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9934297 A1 19990708
Application: WO 98US27689 19981228 (PCT/WO US9827689)
Priority Application: US 971799 19971231
Designated States: CA JP AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Main International Patent Class: **G06F-013/00**
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 5398
English Abstract
A **storage** router (56) and **storage** network (50) provide virtual local **storage** on remote SCSI **storage** devices (60, 62, 64) to Fibre Channel devices. A plurality of Fibre Channel devices, such as workstations (58), are connected to a Fibre Channel transport medium (52), and a plurality of SCSI **storage** devices (60, 62, 64) are connected to a SCSI bus transport medium (54). The **storage** router (56) interfaces between the Fibre Channel transport medium (52) and the SCSI bus transport medium (54). The **storage** router (56) maps between the workstations (58) and the SCSI **storage** devices (60, 62, 64) and implements access controls for **storage** space on the SCSI **storage** devices (60, 62, 64). The **storage** router (56) then allows access from the workstations (58) to the SCSI **storage** devices (60, 62, 64) using native low level, block protocol in accordance with the mapping and the access controls.

French Abstract
L'invention porte sur un routeur (56) de memoire et sur un reseau (50) de stockage assurant un stockage local virtuel sur des memoires (60, 62, 64) SCSI (interface mini-ordinateurs) raccordees a des dispositifs a canaux de fibres optiques. Une pluralite de dispositifs a canaux de fibres optiques tels que des stations de travail (58) sont raccordes a un

support d'acheminement (52) a canaux de fibres optiques, et une pluralite de memoires SCSI (60, 62, 64) sont raccordees a un support d'acheminement (54) a bus SCSI. Le routeur (56) de memoire assure l'interface entre le support d'acheminement (52) a canaux de fibres optiques et le support d'acheminement (54) a bus SCSI. Le routeur (56) de memoire etablit une correspondance entre les stations de travail (58) et les memoires SCSI (60, 62, 64) et met en oeuvre des commandes d'acces pour espacer le stockage sur les memoires SCSI (60, 62, 64). Le routeur (56) de memoire permet egalement l'acces aux memoires SCSI (60, 62, 64) a partir des stations des stations de travail (58) au moyen d'un protocole en bloc, naturel, a bas niveau conformement a la mise en correspondance et aux commandes d'acces.

Main International Patent Class: **G06F-013/00**
Fulltext Availability:
Detailed Description

English Abstract
A **storage** router (56) and **storage** network (50) provide virtual local **storage** on remote SCSI **storage** devices (60, 62, 64) to Fibre Channel devices. A plurality of Fibre Channel devices, such as workstations (58), are connected to a Fibre Channel transport medium (52), and a plurality of SCSI **storage** devices (60, 62, 64) are connected to a SCSI bus transport medium (54). The **storage** router (56) interfaces between the Fibre Channel transport medium (52) and the SCSI bus transport medium (54). The **storage** router (56) maps between the workstations (58) and the SCSI **storage** devices (60, 62, 64) and implements access controls for **storage** space on the SCSI **storage** devices (60, 62, 64). The **storage** router (56) then allows access from the workstations (58) to the SCSI **storage** devices (60, 62, 64) using native low level, block protocol in accordance with the mapping and the access controls.

Detailed Description
... security controls, with access to the local storage device through native low level, block protocols. These protocols map directly to the mechanisms used by the **storage device** and consist of data **requests** without security controls. Network interconnects typically provide access for a large number of computing devices to data storage on a remote network server. The remote network **server** provides file system structure, **access** control, and other miscellaneous capabilities that include the network interface. **Access** to data through the network **server** is through network protocols that the **server** must translate into low level **requests** to the **storage device** . A workstation with **access** to the **server** storage must translate its file system protocols into network protocols that are used to communicate with the server. Consequently, from the perspective of a such **server** data, the **access** is much slower than access to data on a local storage device.

SUMMARY OF THE INVENTION
In accordance with the present invention, a storage router...

20/5,K/54 (Item 29 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00487155 **Image available**
HYBRID DATA STORAGE AND RECONSTRUCTION SYSTEM AND METHOD FOR A DATA STORAGE DEVICE
SYSTEME DE MEMORISATION DE DONNEES HYBRIDE ET DE RECONSTITUTION ET PROCEDE POUR UN DISPOSITIF DE MEMORISATION DE DONNEES
Patent Applicant/Assignee:
SEAGATE TECHNOLOGY INC,

Inventor(s):
ANDERSON David B,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9918507 A1 19990415
Application: WO 98US21080 19981007 (PCT/WO US9821080)
Priority Application: US 9762663 19971008
Designated States: CN DE GB JP KR SG
Main International Patent Class: **G06F-011/08**
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 19577
English Abstract
A hybrid data reconstruction system (600) and method (630/660) for a data **storage** device. Data (614/616) is selectively stored according to one of two or more redundancy schemes (618/620) such that critical data (614) is stored according to a scheme (618) which has a higher degree of redundancy.

French Abstract
L'invention concerne un systeme de reconstitution de donnees hybrides (600) et un procede (630/660) pour un dispositif de memorisation de donnees. Des donnees (614/616) sont memorisees selectivement suivant l'un des deux ou plusieurs systemes redondants (618/620), de telle facon que les donnees critiques (614) soient memorisees conformement a un systeme (618) a haut degre de redondance.

Main International Patent Class: **G06F-011/08**
Fulltext Availability:
Detailed Description

English Abstract
A hybrid data reconstruction system (600) and method (630/660) for a data **storage** device. Data (614/616) is selectively stored according to one of two or more redundancy schemes (618/620) such that critical data (614) is stored...

Detailed Description
... 114 and
the location information, in order to access an object on storage device 110. The extent to which file server 114 controls access to **storage device** 110 is primarily a **function** of the security requirements of the particular implementation of system 100.

In the block diagram illustrated in FIG. 3-1, system 100 is assumed to...

20/5,K/58 (Item 33 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00429960 **Image available**
METHOD AND SYSTEM FOR STORAGE AND RETRIEVAL OF DATA ON A TAPE MEDIUM
PROCEDE ET SYSTEME POUR STOCKER ET EXTRAIRE DES DONNEES AVEC UN SUPPORT EN BANDE
Patent Applicant/Assignee:
STORAGE TECHNOLOGY CORPORATION,
Inventor(s):
HOWARD David,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9820424 A1 19980514
Application: WO 97US19155 19971021 (PCT/WO US9719155)
Priority Application: US 96743526 19961104
Designated States: JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Main International Patent Class: **G06F-013/362**

Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 19527

English Abstract
A general purpose method is provided for interfacing with a **storage** device having a tape medium (22). The method includes receiving data from a first source (16), and creating a first data packet (10) having at least a portion of the data from the first source (16). The method also includes receiving data from a second source (18), and creating a second data packet (12) having at least a portion of the data from the second source (18). The method further includes receiving additional data from the first source (16), and creating a third data packet having at least a portion of the additional data from the first source (16). The method still further includes transmitting the first data packet (10), the second data packet (12) and the third data packet to the **storage device** , and **storing** the first data packet (10), the second data packet (12), and the third data packet on the tape medium (22) in an interleaved configuration. A system including control logic (24) is also provided for performing the method.

French Abstract
L'invention concerne un procede d'interet general qui permet de creer une interface avec un dispositif memoire comportant un support en bande (22). Selon le procede, des donnees sont recues d'une premiere source (16) et un premier paquet de donnees (10), comportant au moins une partie des donnees en provenance de la premiere source (16), est cree. Puis des donnees sont recues d'une seconde source (18), et un second paquet de donnees (12), comportant au moins une partie des donnees en provenance de la seconde source (18), est cree. Des donnees complementaires sont recues de la premiere source (16), et un troisieme paquet de donnees, comportant au moins une partie des donnees complementaires en provenance de la premiere source (16), est cree. Le premier paquet de donnees (10), le second paquet de donnees (12) et le troisieme paquet de donnees sont transmis au dispositif memoire, et stockes sur la bande (22) dans une configuration entrelacee. L'invention concerne egalement un systeme comportant une logique de commande (24), qui permet de mettre en oeuvre le procede.

Main International Patent Class: **G06F-013/362**
Fulltext Availability:
Detailed Description

English Abstract
A general purpose method is provided for interfacing with a **storage** device having a tape medium (22). The method includes receiving data from a first source (16), and creating a first data packet (10) having at...

...source (16). The method still further includes transmitting the first data packet (10), the second data packet (12) and the third data packet to the **storage device** , and **storing** the first data packet (10), the second data packet (12), and the third data packet on the tape medium (22) in an interleaved configuration. A...

Detailed Description
... READ) or write (UPDATE) access to the real datasets (server datasets), the started task or server job also requires sufficient access (CONTROL) to catalog the **client** datasets.

The **server jobs** and started **task** also perform **proxy** checking on behalf of the **client jobs** . This means that errors will be reported by the **server** rather than the **client job** . Errors will be reported back to the client by the server. The normal reaction will be to ABEND. The security checking is done this way because

it enables a non- **authorized** program to connect to the **server** **jobs** or started **task** by the internal APL. As always, the client cannot be depended upon to perform the security check correctly, so the server has to perform the...

20/5,K/60 **(Item 35 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT

00400771 **Image available**
AN ADVANCED DATA SERVER WITH AN I/O RING COUPLED TO A DISC ARRAY RING
SERVEUR DE DONNEES PERFECTIONNE POURVU D'UN ANNEAU E/S COUPLE A UN ANNEAU DE PILE DE DISQUES
Patent Applicant/Assignee:
PHILIPS ELECTRONICS N V,
PHILIPS NORDEN AB,
Inventor(s):
EFRON Edward,
OSTLUND Hark Leon,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9741515 A2 19971106
Application: WO 97IB398 19970414 (PCT/WO IB9700398)
Priority Application: US 96641153 19960429
Designated States: JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Main International Patent Class: H04N-007/173
International Patent Class: **G06F-13:16**
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 10616

English Abstract
An advanced data server including an I/O ring coupled to at least one I/O access channel which provides data to the I/O ring or reads data out from the I/O ring; a **disc** array ring coupled to at least two **disc** arrays which store therein data received from the **disc** array ring or retrieve therefrom data for receipt by the **disc** array ring, the **disc** array ring also being coupled to the I/O ring so that data can flow between those rings; and a server controller coupled to the I/O ring and the **disc** array ring for controlling the operations thereof.

French Abstract
Ce serveur de donnees perfectionne comprend un anneau E/S couple a au moins un canal d'acces E/S, lequel fournit des donnees a l'anneau E/S ou lit des donnees provenant de cet anneau E/S, un anneau de pile de disques couple a au moins deux piles de disques qui stockent les donnees recues a partir de l'anneau de la pile de disque ou recherchent des donnees aux fins de reception de celles-ci par l'anneau de la pile de disques, lequel est egalement couple a l'anneau E/S de maniere que les donnees puissent circuler entre ces anneaux. Ce serveur comprend egalement un organe de commande, couple a l'anneau E/S et a l'anneau de la pile de disques, et destine a commander le fonctionnement de ces anneaux.

International Patent Class: **G06F-13:16**
Fulltext Availability:
Detailed Description

English Abstract
...at least one I/O access channel which provides data to the I/O ring or reads data out from the I/O ring; a **disc** array ring coupled to at least two **disc** arrays which store therein data received from the **disc** array ring or retrieve therefrom data for receipt by the **disc** array ring, the **disc** array ring also being coupled to the I/O ring so that data can flow between those rings; and a server controller coupled to the I/O ring and the **disc** array ring for controlling the operations thereof.

Detailed Description
... 50 works in a similar fashion.

A user connected to a user interface device (e.u., user interface device 42) provides, via that user interface **device** , a **command** to **server operation** controller 30 indicating that he or she wants to store a program in server system 50 (which prograrn is hereinafter referred to as the " **storage** program"). Upon receiving that **command** , which will include Information about the size of the **storage** program, **server operation** controller 30 determines which of **servers** 10, 20 and 22, with the aid of the server controllers thereof, is available and has the necessary capacity to store that program. (if none of the servers 10, 20 and 22 has sufficient capacity to store that program, **server operation** controller 30 will provide that information, via the appropriate user interface device, to the user who desires to store the storage program. This in turn indicates that additional disc arrays, disc drives and/or servers should be added to **server** system 50.) If **server operation** controller 30 determines that **server** 10, for example, is the appropriate server to store the storage procyrani, It then determines to which 1/0 **access** channel COLIpled to **server** 10 that program will be provided to for **storage** therein. In addition, **server operation** controller 30 determines when the **storage** program will be received. Based on that information, **operation server** controller 30 provides the appropriate information, as discussed above, to server 10 so that the storage program is stored therein. Thereafter, **server operation** controller 30 stores information in **data base** 31 indicating that the storage program has been stored on server 10.

O C)
Server systern 50 is easily expandable. More specifically, the

20/5,K/61 (Item 36 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00305225
DATA STORAGE MANAGEMENT FOR NETWORK INTERCONNECTED PROCESSORS
GESTION DE MEMORISATION DE DONNEES POUR PROCESSEURS INTERCONNECTES EN RESEAU
Patent Applicant/Assignee:
AVAIL SYSTEMS CORPORATION,
Inventor(s):
BLICKENSTAFF Ronald L,
BRANT Catherine Irlam,
DODD Paul David,
KIRCHNER Anton H,
MONTEZ Jennifer Kay,
TREDE Brian Eldred,
WINTER Richard Allen,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9523376 A1 19950831
Application: WO 95US1660 19950210 (PCT/WO US9501660)
Priority Application: US 94201658 19940225
Designated States: AU CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Main International Patent Class: **G06F-012/08**
International Patent Class: **G06F-03:06**
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 15160

English Abstract
The data **storage** system is connected to a local area network (1) and includes a **storage** server (50) that, on a demand basis and/or on a periodically scheduled basis, audits the activity on each volume of each

data **storage** device (31-33) that is connected to the network (1). Low priority data files are migrated via the network (1) and the **storage** server (50) to backend data **storage** media (61-65), and the directory resident in the data **storage** device (31-33) is updated with a placeholder entry to indicate that this data file has been migrated to backend **storage** (61-65). When the processor (21-22) requests this data file, the placeholder entry enables the **storage** server (50) to recall the requested data file to the data **storage** device (31-33) from which it originated.

French Abstract
Ce systeme de memorisation de donnees est connecte a un reseau local (1) et comprend un serveur de memorisation (50) qui, en fonction de la demande et/ou d'un programme periodique, analyse l'activite sur chaque volume de chaque memoire (31-33) connectee au reseau (1). Les fichiers de donnees de faible priorite sont transferes par l'intermediaire du reseau (1) et du serveur de memorisation (50) vers des supports de donnees dorsaux (61-65), et le repertoire residant dans les memoires (31-33) est mis a jour au moyen d'une marque de reservation en entree afin d'indiquer que ce fichier de donnees a ete transfere vers les supports de donnees dorsaux (61-65). Lorsque le processeur (21-22) demande ce fichier, la marque de reservation en entree permet au serveur de memorisation (50) de rappeler le fichier demande a partir de la memoire (31-33) d'origine.

Main International Patent Class: **G06F-012/08**
International Patent Class: **G06F-03:06**
Fulltext Availability:
Detailed Description

English Abstract
The data **storage** system is connected to a local area network (1) and includes a **storage** server (50) that, on a demand basis and/or on a periodically scheduled basis, audits the activity on each volume of each data **storage** device (31-33) that is connected to the network (1). Low priority data files are migrated via the network (1) and the **storage** server (50) to backend data **storage** media (61-65), and the directory resident in the data **storage** device (31-33) is updated with a placeholder entry to indicate that this data file has been migrated to backend **storage** (61-65). When the processor (21-22) requests this data file, the placeholder entry enables the **storage** server (50) to recall the requested data file to the data **storage** device (31-33) from which it originated.

Detailed Description
... choice and are noted here simply to illustr ate the invention.

When the sweep operation is initiated at step 601 at the predetermined time, the **operations** kernel 501 in **storage server processor** 51 **accesses** at step 602, via network interface 502, data communication link 11 and network interface 503, the data file directory 511 that is stored in memory...

...is part of file server 41 are listed in directory 511. File system manager 521 typically manages directory 511, which lists the data file, its **storage** location and attributes. **Operations** kernel 501 at step 603 orders aH the data files in each managed network volume in a predetermined manner into a priority list, such as...531 in the file server 41. The placeholder entry in directory 511 the file server 41 points to this secondary storage directory entry. Thus, the **processor** 21 at step 801 **requests** access to this migrated data file and this request is intercepted at step 802 by a trap or interface 711 in the file server 41...

...routine can be implemented that allows the storage server agent 121 to register with the file system 41 and be called when the data file **request** is received from the **processor** 21. In either case, the trapped **request** is forwarded to **storage server** agent 121 to determine whether the requested data file is migrated to secondary storage 52. This

is accomplished by storage server agent 121 at step...

...file recall request and transmits this request together with the direct access secondary storage pointer key stored in the placeholder entry via network 1 to **storage server** 50. At step 808, **operations** kernel 501 uses systems services 505 which uses the pointer key to directly retrieve the entry in secondary storage directory 531. This identified entry in...

20/5,K/62 (Item 37 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00295433 **Image available**
MASS DATA STORAGE LIBRARY
BIBLIOTHEQUE DE DONNEES DE GRANDE CAPACITE
Patent Applicant/Assignee:
E-SYSTEMS INC,
Inventor(s):
MARTIN Charles W,
REID Fredrick S,
FORBUS Gary L,
ADAMS Steve M,
SHANNON C Patrick,
PIRPICH Eric A,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9513582 A1 19950518
Application: WO 94US12212 19941103 (PCT/WO US9412212)
Priority Application: US 93150810 19931112
Designated States: AM AU BB BG BR BY CA CN CZ FI GE HU JP KE KG KP KR KZ LK LT LV MD MG MN MW NO NZ PL RO RU SD SI SK TJ TT UA UZ VN KE MW SD SZ AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Main International Patent Class: **G06F-012/00**
International Patent Class: **G06F-12:06** ; **G06F-13:00**
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 14641

English Abstract
A plurality of data **storage** modules (104) forming a mass data **storage** library, with a directory archive (78) maintaining a directory of the information contained on each data **storage** module (file server application) or on the **storage** modules retained in the library (volume server application). A plurality of interface computers (122) are coupled to a plurality of host computers (12) for receiving data and generating request signals to access the mass **storage** library.

French Abstract
Une pluralite de modules de stockage d'informations (104) constitue une bibliotheque de donnees de grande capacite, laquelle comprend une archive de repertoire (78) etablissant un repertoire des informations contenues dans chaque module de stockage de donnees (application serveur de fichier) ou dans les modules de stockage maintenus dans la bibliotheque (application serveur de volume). Une pluralite d'ordinateurs d'interface (122) sont connectes a une pluralite d'ordinateurs centraux (12) afin de recevoir des donnees et de generer des signaux de requete permettant d'acceder a la bibliotheque de grande capacite.

Main International Patent Class: **G06F-012/00**
International Patent Class: **G06F-12:06** ...

... **G06F-13:00**
Fulltext Availability:
Detailed Description

English Abstract

A plurality of data **storage** modules (104) forming a mass data **storage** library, with a directory archive (78) maintaining a directory of the information contained on each data **storage** module (file server application) or on the **storage** modules retained in the library (volume server application). A plurality of interface computers (122) are coupled to a plurality of host computers (12) for receiving data and generating request signals to access the mass **storage** library.

Detailed Description

... are of
comparable power as CONVEX computers that provide a direct tape storage capability. In a smaller configuration for the system 10, an IFS tape **server** may also **function** as a **disk server** .

The **computers** 14 16 18 and 19 may be accessed simultaneously and in parallel by one or more of the host computers 12. In like manner, multiple...

25/5,K/4 (Item 4 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00995284
Parallel file system and method for multiple node file access
Paralleles Dateiensystem und Verfahren zum Dateienzugriff auf mehrere Knoten
Systeme de fichier parallele et procede pour l'acces au fichiers de plusieurs noeuds
PATENT ASSIGNEE:
International Business Machines Corporation, (200120), Old Orchard Road, Armonk, N.Y. 10504, (US), (applicant designated states: AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
INVENTOR:
Schmuck, Frank B., 406-A Union Avenue, Campbell, CA 95008, (US)
McNabb, Daniel Lloyd, 14926 Diduca Way, Los Gatos, CA 95031, (US)
Wyllie, James C., 18392 Chadbourne Lane, Monte Sereno, CA 95030, (US)
Schmueli, Boaz, 108 Hatishbi Street, Haifa 34521, (IL)
LEGAL REPRESENTATIVE:
Zerbi, Guido Maria (77893), Intellectual Property Department, IBM United Kingdom Ltd., Hursley Park, Winchester, Hampshire SO21 2JN, (GB)
PATENT (CC, No, Kind, Date): EP 899667 A2 990303 (Basic)
APPLICATION (CC, No, Date): EP 98304758 980617;
PRIORITY (CC, No, Date): US 893865 970711
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: G06F-017/30;

ABSTRACT EP 899667 A2
A computer system having a shared disk file system running on multiple computers each having their own instance of an operating system and being coupled for parallel data sharing access to files residing on network attached shared disks. Methods are provided for use as a parallel file system in a shared disk environment by use of a scalable directory service for the system with a stable cursor, a segmented allocation map. Dynamic prefetch and cached balance pools for multiple accesses improve the system. Extended file attributes are used for implementation of Access Control Lists in a parallel file system.
ABSTRACT WORD COUNT: 100

LEGAL STATUS (Type, Pub Date, Kind, Text):
Application: 990303 A2 Published application (A1with Search Report ;A2without Search Report)
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9909	518
SPEC A	(English)	9909	25810
Total word count - document A			26328
Total word count - document B			0
Total word count - documents A + B			26328

...SPECIFICATION allocates disk blocks independently on all the nodes of a parallel system. This means that no one else will face the problem until they try **network attached storage** systems. We allocate **storage** in parallel for performance reasons. Any allocation **server** solution would have bottlenecks and recovery problems. We must have quota because users wish to control the usage of **disk storage** across the entire parallel processing system. The solution **allows** parallel allocation, does not force continual locking of a global quota which would be slow and provides for recovery of processing failures in a timely...allocates disk blocks independently on all the nodes of a parallel system. This means that no one else will face the problem until they try **network attached storage** systems.

We allocate **storage** in parallel for performance reasons and avoid a single **server** solution which has bottlenecks and recovery problems. We must have quota because users wish to control the usage of **disk**

storage across the entire parallel processing system. The solution **allows** parallel allocation, does not force continual locking of a global quota which would be slow and provides for recovery of processing failures in a timely...

25/5,K/9 (Item 9 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00458617
Database processing system.
Datenbankverarbeitungssystem.
Systeme de traitement de base de donnees.
PATENT ASSIGNEE:
International Business Machines Corporation, (200120), Old Orchard Road, Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB;IT)
INVENTOR:
Baum, Richard Irwin, 5 Arbor Hill Drive, Poughkeepsie, New York 12603, (US)
Brent, Glen Alan, 55 Ward Place, Fishkill, New York 12590, (US)
Gibson, Donald Henderson, Leprechaun Lane, RD No. 1, Box 387, Salt Point, New York 12578, (US)
Lindquist, David Bruce, 106 Hillis Terrace, Poughkeepsie, New York 12603, (US)
LEGAL REPRESENTATIVE:
Harrison, Robert John (74511), IBM Deutschland Informationssysteme GmbH, D-70548 Stuttgart, (DE)
PATENT (CC, No, Kind, Date): EP 449096 A2 911002 (Basic)
EP 449096 A3 930721
APPLICATION (CC, No, Date): EP 91104337 910320;
PRIORITY (CC, No, Date): US 499844 900327
DESIGNATED STATES: DE; FR; GB; IT
INTERNATIONAL PATENT CLASS: G06F-015/40;
CITED PATENTS (EP A): WO 8912277 A; EP 70119 A; EP 66061 A; GB 2235798 A
CITED REFERENCES (EP A):
PATENT ABSTRACTS OF JAPAN vol. 13, no. 448 (P-942)9 October 1989
PATENT ABSTRACTS OF JAPAN vol. 14, no. 179 (P-1034)10 April 1990;

ABSTRACT EP 449096 A2
A processor functioning as a coprocessor attached to a central processing complex provides efficient execution of the functions required for database processing:
sorting, merging, joining, searching and manipulating fields in a host memory system. The specialized functional units: a memory interface and field extractor/assembler, a Predicate Evaluator, a combined sort/merge/join unit, a hasher, and a microcoded control processor, are all centered around a partitioned Working Store. Each functional unit is pipelined and optimized according to the function it performs, and executes its portion of the query efficiently. All functional units execute simultaneously under the control processor to achieve the desired results. Many different database functions can be performed by chaining simple operations together. The processor can effectively replace the CPU bound portions of complex database operations with functions that run at the maximum memory access rate improving performance on complex queries.
(see image in original document)
ABSTRACT WORD COUNT: 148

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application:	911002 A2	Published application (A1with Search Report ;A2without Search Report)
Examination:	920226 A2	Date of filing of request for examination: 911219
Change:	930407 A2	Representative (change)
Change:	930512 A2	Representative (change)
Search Report:	930721 A3	Separate publication of the European or International search report
Change:	940216 A2	Representative (change)

Withdrawal: 960904 A2 Date on which the European patent application was withdrawn: 960715
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	1691
SPEC A	(English)	EPABF1	20259
Total word count - document A			21950
Total word count - document B			0
Total word count - documents A + B			21950

...SPECIFICATION systems having no sort processor) can cause a bottleneck for data traffic between the main memory 106 and the sort processor 100.

Another approach to **database** processing off-loads some of the **database** processing tasks traditionally handled by the CPU to a vector processing element. FIG. 2 is an illustration of one such prior art relational **data base** managing system utilizing a vector processor. A central processor 200 includes a scalar processor 202 and a vector processor 204. Both the vector and scalar processors have **access** to a main memory 206 and a subsidiary **storage** 208.

In operation, a database command issued from an application program 210 is examined by a relational database managing program 212. The database managing program...

25/5,K/56 (Item 46 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00736202 **Image available**
CHARACTERIZATION OF DATA ACCESS USING FILE SYSTEM
CARACTERISATION D'ACCES DE DONNEES AU MOYEN D'UN SYSTEME DE FICHIERS
Patent Applicant/Assignee:
AUSPEX SYSTEMS INC, 2300 Central Expressway, Santa Clara, CA 95050-2516, US, US (Residence), US (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
POTHAPRAGADA Srinivas, 4201 Norwalk Drive #DD108, San Jose, CA 95129, US, US (Residence), IN (Nationality), (Designated only for: US)
NARAYANASWAMY Lakshman, Apartment B, 1073 Alta Mira Drive, Santa Clara, CA 95051, US, US (Residence), IN (Nationality), (Designated only for: US)
BHANJOIS Bhimsen, Apartment 40-B, 444 Saratoga Avenue, Santa Clara, CA 95050, US, US (Residence), IN (Nationality), (Designated only for: US)
BODAS Amod, Suite 300, 225 East Beaver Creek Road, Richmond Hill, Ontario L4B 3P4, CA, CA (Residence), IN (Nationality), (Designated only for: US)
COVIELLO John S, 4355 Renaissance Drive #8-312, San Jose, CA 95134, US, US (Residence), US (Nationality), (Designated only for: US)
Legal Representative:
TROESCH Hans R (agent), Fish & Richardson P.C., Suite 100, 2200 Sand Hill Road, Menlo Park, CA 94025, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200049537 A2-A3 20000824 (WO 0049537)
Application: WO 2000US4328 20000218 (PCT/WO US0004328)
Priority Application: US 99251753 19990218
Designated States: CN JP KR US
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Main International Patent Class: G06F-017/30
Publication Language: English
Filing Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 8751

English Abstract

Apparatus and methods manage data stored on one or more data storage devices using an adaptive file system by characterizing the data on the data storage devices managed by the file system; and tuning the file system by selecting one or more options to configure operation of the file system.

French Abstract
L'invention concerne un appareil et des procedes de gestion de donnees memorisees dans au moins un dispositif de stockage de donnees a l'aide d'un systeme de fichiers adaptatif. Lesdits procedes consistent a caracteriser les donnees presentes dans les dispositifs de stockage de donnees geres par le systeme de fichiers, et a regler ce dernier par la selection d'au moins une option pour la configuration du fonctionnement du systeme de fichiers.

Legal Status (Type, Date, Text)
Publication 20000824 A2 Without international search report and to be republished upon receipt of that report.
Search Rpt 20020926 Late publication of international search report
Republication 20020926 A3 With international search report.

Fulltext Availability:
Detailed Description

Detailed Description
... be reloaded. In these cases, the automatic optimization may be suboptimal or unnecessary, leading to inefficiencies in such systems. The access speed of data in **servers** with **Network Attached Storage** (NAS)
systems depends not only on the network **access** methodology, but also on the data flow within the **server** . Thus, the way the data is physically written or read from the **disk** , the layout of the file systems and the paging characteristic of the file system affect system performance. Many file systems--e.g., Unix File System...

...may optimize performance using techniques such as pre-allocation of blocks in the case of sequential writes, delayed block allocation in the case of random **access** , and queuing of **disk** blocks within streams, among others. However, these systems make certain assumptions about the way the user data is characterized and classifies data as sequential, random...

27/5,K/3 **(Item 3 from file: 348)**
DIALOG(R)File 348:EUROPEAN PATENTS

00907598
Dynamic reconfiguration of network servers
Dynamische Rekonfiguration von Netzwerk-Servern
Reconfiguration dynamique de serveurs de reseau
PATENT ASSIGNEE:
LUCENT TECHNOLOGIES INC., (2143720), 600 Mountain Avenue, Murray Hill, New Jersey 07974-0636, (US), (applicant designated states: AT;BE;CH;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)
INVENTOR:
Nepustil, Vladimir, 4905 Qualla Drive, Boulder, Colorado 80303, (US)
LEGAL REPRESENTATIVE:
Williams, David John et al (86433), Page White & Farrer, 54 Doughty Street, London WC1N 2LS, (GB)
PATENT (CC, No, Kind, Date): EP 828214 A2 980311 (Basic)
EP 828214 A3 981202
APPLICATION (CC, No, Date): EP 97306778 970902;
PRIORITY (CC, No, Date): US 711189 960909
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: G06F-009/46; H04L-029/06;

ABSTRACT EP 828214 A2
One or more portions (221) of a database (220) which a primary server (106) uses to process client requests are duplicated (211) on one or more supplemental servers (105). As the clients demand for service increases and the processing load on the primary server becomes excessive (400), the primary server automatically **off - loads** the **processing** of those portions of the client requests that require one or more of the duplicated portions onto the supplemental servers by substituting (402) a secondary page (253) or a secondary object in its database that points to the one or more duplicated portions in the supplemental servers for a corresponding primary page (252) or a primary object in its database that points to the one or more duplicated portions in its database. The supplemental servers then serve the portions of the client requests that require the one or more of the duplicated portions. As demand for service decreases and the primary server becomes underloaded (404), it automatically restores (406) the primary page or the primary object in its database and resumes serving the entire client requests.
ABSTRACT WORD COUNT: 181

LEGAL STATUS (Type, Pub Date, Kind, Text):
Change: 010117 A2 Legal representative(s) changed 20001128
Application: 980311 A2 Published application (A1with Search Report ;A2without Search Report)
Search Report: 981202 A3 Separate publication of the European or International search report
Examination: 990721 A2 Date of filing of request for examination: 990519
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language Update Word Count
CLAIMS A (English) 9811 1213
SPEC A (English) 9811 2874
Total word count - document A 4087
Total word count - document B 0
Total word count - documents A + B 4087

...ABSTRACT supplemental servers (105). As the clients demand for service increases and the processing load on the primary server becomes excessive (400), the primary server automatically **off - loads** the **processing** of those portions of the client requests that require one or more of the duplicated portions onto the supplemental servers by substituting (402) a secondary...

...SPECIFICATION servers "on-the-fly." Moreover, measurements and limits

other than the number of accesses per unit of time can be used to determine whether to **off - load** or return **processing** from or to the primary server. These measurements and limits can be forward-looking, such as predictive algorithms which estimate future load based on load...

...Furthermore, the main server can request present processing load data from the stand-by servers and incorporate these data into its decision of whether to **off - load processing** to those stand-by servers.

27/5,K/16 (Item 6 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00753760 **Image available**
NETWORK-BASED MAIL ATTACHMENT STORAGE SYSTEM AND METHOD
SYSTEME DE STOCKAGE DE PIECES JOINTES DANS UN SYSTEME DE COURRIER EN RESEAU ET PROCEDE CORRESPONDANT

Patent Applicant/Assignee:
THINMAIL INC, 5 Sycamore Road, Sudbury, MA 01776, US, US (Residence), US (Nationality)
Inventor(s):
POLLACK Jordan, 5 Sycamore Road, Sudbury, MA 01776, US
Legal Representative:
SHANSKE Jason D, Iandiorio & Teska, 260 Bear Hill Road, Waltham, MA 02451-1018, US

Patent and Priority Information (Country, Number, Date):
Patent: WO 200067133 A1 20001109 (WO 0067133)
Application: WO 2000US9561 20000411 (PCT/WO US0009561)
Priority Application: US 99302877 19990430
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: G06F-013/00
International Patent Class: G06F-015/16; G06F-015/167; G06F-017/30; H04L-012/00
Publication Language: English
Filing Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 6053

English Abstract
A **network** -based mail **attachment storage** system (10) and method for: receiving from a sender (16) an electronic mail item (14) which contains a forwarding specification (18) and an attachment (20); detaching the attachment (20) from the electronic mail item (14); storing the attachment (20) on a storage device (26) at a specific address (40) under a specific file name (38); generating a handle (44) corresponding to the specific address (40) and the specific file name (38); appending the electronic mail item (14) to include the handle (44); and transmitting in accordance with the forwarding specification (18) the appended electronic mail item (14'), including the handle (44) but excluding the stored attachment (20).

French Abstract
L'invention concerne un systeme de stockage de pieces jointes (10) de courrier en reseau et un procede pour: recevoir d'un utilisateur (16) un item de courrier electronique (14) qui contient une indication de reexpedition (18) et une piece jointe (20); separer la piece jointe (20) de l'item de courrier electronique (14); stocker la piece jointe (20) dans un dispositif de stockage (26) a une adresse determinee (40) et sous

un nom de fichier determine (38); generer un indicateur (44) correspondant a l'adresse determinee (40) et au nom de fichier determine (38); ajouter l'item de courrier electronique (14) pour inclure l'indicateur (44); et transmettre conformement a l'indication de reexpedition (18) l'item de courrier electronique contenant l'ajout (14'), qui contient l'indicateur (44) mais pas la piece jointe (20) stockee.

Legal Status (Type, Date, Text)
Publication 20001109 A1 With international search report.
Examination 20010215 Request for preliminary examination prior to end of 19th month from priority date

Fulltext Availability:
Detailed Description
Claims

English Abstract
A **network** -based mail **attachment** **storage** system (10) and method for: receiving from a sender (16) an electronic mail item (14) which contains a forwarding specification (18) and an attachment (20...

Detailed Description
... to a process that can take an hour or more.

SUMMARY OF INVENTION
It is therefore an object of this invention to provide such a **network** -based mail **attachment** **storage** system and method which **allows** a user to quickly and easily download e-mail.

It is a further object of this invention to provide such a system which detaches email...

...attachment, so that the intended recipient, at his election, can retrieve the stored attachment at a later time, via the handle.

This invention features a **network** -based mail **attachment** **storage** system
comprising: a receiving portal for receiving from a sender an electronic mail item which contains a forwarding specification and an attachment; an attachinent stripper...

...specific address under a specific file name; a handle generator for generating a handle corresponding to the specific address and the specific file name which **allows** **access** to the attachment stored at the specific address under the specific file name; a handle appender for appending the handle to the electronic mail item; and a transmitting portal for transmitting in accordance with the forwarding specification the appended electronic mail item including the handle but excluding the stored **attachment** .

In a preferred embodiment, the **network** -based mail **attachment** **storage** system may include a parser for extracting a recipient address from the forwarding specification.

The **network** -based mail **attachment** **storage** system may include an attachment retriever for enabling the recipient to retrieve at a later date the stored attachment stored under the specific file name at the specific address via the handle. The **network** -based mail **attachment** **storage** system may include a policy interpreter for determining if the recipient is to be charged a fee for retrieving the stored **attachments** . The **network** -based mail **attachment** **storage** system may include a deletion timer for calculating a deletion time after which the stored **attachment** is deleted. The **network** -based mail **attachment** **storage** system may include an attachment deleter for deleting the stored attachment upon the expiration of the deletion time. The **network** -based mail **attachment** **storage** system may include a sender notifier for notifying the sender when the recipient retrieved the stored **attachment**

. The **network** -based mail **attachment** **storage** system may include an attachment comparator for comparing the stored attachment to previously-stored attachments to determine if any **attachments** are identical. The **network** -based mail **attachment** **storage** system may include a redundancy deleter which deletes a stored attachment when it is identical to a previously-stored **attachment** . The **network** -based mail **attachment** **storage** system may include a handle redirector for redirecting the handle pointing to the deleted attachment so that it points to the identical previously-stored attachment. The handle may be a uniform resource locator. The storage device may be chosen from the group consisting of hard drives, optical drives, random **access** memories, tape drives and RAID arrays.

This invention also features a network-based mail attachment storage method comprising the steps of: receiving from a sender...

Claim
CLAIMS
A **network** -based mail **attachment** **storage** system comprising:
a receiving portal for receiving from a sender an electronic mail item which contains a forwarding specification and an attachment;
an attachment stripper...

...attachment at a specific
address under a specific file name;
a handle generator for generating a handle corresponding to said address and file name which **allows** **access** to said attachment stored at said specific
address under said specific file name;
a handle appender for appending said handle to said electronic mail item;
a transmitting portal for transmitting in accordance with the forwarding specification said appended electronic mail item including said handle but excluding said stored **attachment** .

2 The **network** -based mail **attachment** **storage** system of claim 1 further including a parser for extracting a recipient address from said forwarding specification.
3 . The network-based mail attachment storage system...

...previously-stored attachment.

11 The network-based mail attachment storage system of claim I in which said handle is a uniform resource locator.

12 The **network** -based mail **attachment** **storage** system of claim I in which said storage device is chosen from the group consisting of hard drives, optical drives, random **access** memories, tape drives and RAID arrays.

13 A network-based mail attachment storage method comprising the steps of:
receiving from a sender an electronic mail...

27/5,K/18 (Item 8 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00549718 **Image available**
INTELLIGENT NETWORK INTERFACE DEVICE AND SYSTEM FOR ACCELERATING COMMUNICATION
DISPOSITIF D'INTERFACE RESEAU INTELLIGENT ET SYSTEME PERMETTANT D'ACCELERER LES COMMUNICATIONS
Patent Applicant/Assignee:
ALACRITECH CORPORATION,
BOUCHER Laurence B,
BLIGHTMAN Stephen E J,

CRAFT Peter K,
HIGGEN David A,
PHILBRICK Clive M,
STARR Daryl,
Inventor(s):
BOUCHER Laurence B,
BLIGHTMAN Stephen E J,
CRAFT Peter K,
HIGGEN David A,
PHILBRICK Clive M,
STARR Daryl,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200013091 A1 20000309 (WO 0013091)
Application: WO 98US24943 19981120 (PCT/WO US9824943)
Priority Application: US 98141713 19980828
Designated States: AU CA IL JP KR MX SG AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Main International Patent Class: G06F-013/00
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 18717

English Abstract
An intelligent network interface card or communication processing device (30) works with a host computer (20) for data communication. The device provides a fast-path (159) that avoids protocol processing for most messages, greatly accelerating data transfer and **offloading** time-intensive **processing tasks** from the host CPU (28). The host retains a fallback processing capability for messages that do not fit fast-path criteria, with the device providing assistance such as **validation** even for slow-path messages, and messages being selected for either fast-path or slow-path (158) processing. A context (50) for a connection is defined that **allows** the device to move data, free of headers, directly to or from a destination or source in the host. The context can be passed back to the host for message processing by the host. The device contains specialized hardware circuits that are much faster at their specific tasks than a general purpose CPU. A preferred embodiment includes a trio of pipelined processors (482, 484, 486) devoted to receive, transmit and utility processing, providing full duplex communication for four Fast Ethernet nodes.

French Abstract
Cette invention concerne une carte d'interface reseau intelligente, ou dispositif de traitement de communications (30), qui fonctionne avec un ordinateur hote (20) afin d'assurer la communication de donnees. Ce dispositif utilise une voie rapide (159) qui permet d'eviter le traitement protocolaire pour la plupart des messages, et d'accelerer sensiblement le transfert de donnees et les taches de traitement de dechargement intensives dans le temps depuis l'UCT hote (28). L'hote conserve une capacite de traitement de secours pour les messages ne repondant pas aux criteres de la voie rapide, tandis que le dispositif fournit une assistance, telle qu'une validation, meme pour les messages par voie lente, lesdits messages etant selectionnes pour un traitement par voie rapide ou par voie lente (158). Un contexte (50) de connexion est defini afin que le dispositif puisse deplacer des donnees, sans en-tetes, directement vers ou depuis une destination ou une source dans l'hote. Le contexte peut etre renvoye a l'hote afin que ce dernier puisse traiter les messages. Le dispositif comprend des circuits materiels specialises qui sont bien plus rapides dans l'accomplissement de leurs taches specifiques qu'une UCT a vocation generale. Dans un mode de realisation prefere, on utilise un trio de processeurs disposes en pipeline (482, 484, 486) qui sont dedies a la reception, a l'emission et au traitement utilitaire, ce qui permet d'obtenir des communications en duplex integral pour quatre noeuds Ethernet rapide (Fast Ethernet).

English Abstract

...host computer (20) for data communication. The device provides a fast-path (159) that avoids protocol processing for most messages, greatly accelerating data transfer and **offloading** time-intensive **processing tasks** from the host CPU (28). The host retains a fallback processing capability for messages that do not fit fast-path criteria, with the device providing assistance such as **validation** even for slow-path messages, and messages being selected for either fast-path or slow-path (158) processing. A context (50) for a connection is defined that **allows** the device to move data, free of headers, directly to or from a destination or source in the host. The context can be passed back ...

27/5,K/20 (Item 10 from file: 349)

00533600 **Image available**

METHOD AND COMPUTER PROGRAM PRODUCT FOR OFFLOADING PROCESSING TASKS FROM SOFTWARE TO HARDWARE

METHODE ET PRODUIT DE PROGRAMME INFORMATIQUE POUR LE DECHARGEMENT DE TACHES DE TRAITEMENT DE LOGICIEL ET LEUR CHARGEMENT SUR DU MATERIEL

Patent Applicant/Assignee:
MICROSOFT CORPORATION,
Inventor(s):
ANAND Sanjay,
BRANDON Kyle,
SRINIVAS Nk,
HYDER Jameel,

Patent and Priority Information (Country, Number, Date):
Patent: WO 9964952 A1 19991216
Application: WO 99US10273 19990511 (PCT/WO US9910273)
Priority Application: US 9897169 19980612
Designated States: JP AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Main International Patent Class: G06F-009/46
International Patent Class: H04L-029/06
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 9198

English Abstract
The present invention is directed to a method and computer program product for **offloading** specific **processing tasks** that would otherwise be performed in a computer system's processor and memory, to a peripheral device, or devices, that are connected to the computer. The computing task is then performed by the peripheral, thereby saving computer system resources for other computing tasks and increasing the overall computing efficiency of the computer system. In one preferred embodiment, the disclosed method is utilized in a layered network model, wherein computing tasks (304) that are typically performed in network applications are instead offloaded to the network interface card (NIC) peripheral. An application executing on the computer system first **queries** (202) the **processing** , or **task offload** capabilities of the NIC, and then selectively enables (204, 206) those capabilities that may be subsequently needed by the application.

French Abstract
L'invention concerne une methode et un produit de programme informatique pour le dechargement de taches de traitement specifiques qui, autrement, auraient ete executees dans un processeur et une memoire de systeme informatique, et pour leur chargement dans un ou plusieurs dispositifs peripheriques qui sont connectes a l'ordinateur. La tache informatique est ensuite executee par le peripherique, ce qui permet de conserver les ressources du systeme informatique pour d'autres taches de calcul et d'augmenter l'efficacite de calcul globale du systeme informatique. Dans un mode de realisation prefere, ladite methode est utilisee dans un

modele de reseau a couches, dans lequel les taches de calcul (304) qui sont generalement executees dans des applications de reseau sont au lieu de cela, dechargees et chargee sur le peripherique a carte d'interface reseau (NIC). Une application executee sur le systeme informatique demande (202) d'abord les capacites de traitement ou de decharge de tache du NIC, et active selectivement (204, 206) les capacite susceptibles d'etre necessaires ulterieurement a l'application.

Fulltext Availability:
Detailed Description

English Abstract
The present invention is directed to a method and computer program product for **offloading** specific **processing tasks** that would otherwise be performed in a computer system's processor and memory, to a peripheral device, or devices, that are connected to the computer...

...that are typically performed in network applications are instead offloaded to the network interface card (NIC) peripheral. An application executing on the computer system first **queries** (202) the **processing** , or **task offload** capabilities of the NIC, and then selectively enables (204, 206) those capabilities that may be subsequently needed by the application.

Detailed Description
... appropriate network layer, such as checksum calculation/verification; data encryption/decryption; message digest calculation; TCP segmentation- and others. As such, there is an advantage in **offloading** such CPU intensive **task** to a peripheral hardware device. This would reduce processor utilization and memory bandwidth usage in the host computer, and thereby increase the efficiency, speed and...

...to be an efficient method by which a computer system/operating system can identify the processing capabilities of such peripheral devices, and then assign and **offload** specific **processing tasks** to the device when needed. Also, it would be desirable if the tasks could be identified and assigned dynamically, depending on the then current needs of the processor. This would **allow** the computer system processor to take advantage of the capabilities of a hardware peripheral on an as-needed basis.

SUMMARY OF THE INVENTION
The foregoing...

...are connected to the computer system. The various device drivers each respond by identifying their respective hardware peripheral's processing capabilities, referred to herein as " **task offload** capabilities." In the preferred embodiment, once the **task offload** capabilities of each particular peripheral have been identified, the OS can then enable selected peripherals to perforin certain tasks that could potentially be used by...

...could be implemented in connection with essentially any similar type of architecture for managing and controlling network communications. Specifically, the invention provides the ability to **offload tasks** or **functions** that are typically performed on a network packet at, for instance, the various network layers, and which typically require dedicated CPU and memory resources. These **offloaded tasks** can instead be optionally performed by the hardware peripheral that provides the actual physical communications channel to the network -- the NIC. For instance, rather than...

...the data packet as it passes through the respective network layers -- e.g.

checksum calculation/verification, encryption/decryption, message digest calculation and TCP segmentation -- those **tasks** can instead be

offloaded and performed at the NIC hardware.

In a preferred embodiment of the present invention, in the Windows NT layered networking architecture, a transport protocol driver...and, depending on the task(s) offloaded, operate/manipulate the driver's corresponding NIC hardware in the appropriate manner.

Utilizing the actual data packet to **offload** computing **tasks** from the computer processor to the hardware peripheral is advantageous for a number of reasons. For example, the transport driver can utilize the capabilities of the peripheral on a packetby-packet basis. This **allows** tasks to be downloaded dynamically, and the capabilities of a peripheral can be used on an as-needed basis. Thus, if the processing overhead for ...

...tasks, then it can offload tasks to peripheral devices by merely appending the requisite packet extension to the data packets.

Another advantage is the ability **offload** multiple **tasks** by way of a single packet, and essentially "batch" a number of operations at once. For instance, when the computer processor performs a checksum operation ...

...only one operation can be performed at a time, thereby requiring the data to be copied into memory multiple times. However, the per-packet approach **allows** multiple **tasks** to be **offloaded** in one packet. Thus, the hardware peripheral can perform two or more operations in a single pass on the data, depending on the capabilities of...

27/5,K/22 (Item 12 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00450386 **Image available**
A SYSTEM FOR, AND METHOD OF, OFF-LOADING NETWORK TRANSACTIONS FROM A MAINFRAME TO AN INTELLIGENT INPUT/OUTPUT DEVICE, INCLUDING OFF-LOADING MESSAGE QUEUING FACILITIES
SYSTEME ET PROCEDE DE TRANSFERT DE TRANSACTIONS SUR RESEAU, DEPUIS UN PROCESSEUR CENTRAL JUSQU'A UN DISPOSITIF D'ENTREE/SORTIE INTELLIGENT, COMPRENANT LE TRANSFERT DE FONCTIONS DE FILES D'ATTENTE DE MESSAGES
Patent Applicant/Assignee:
WHITNEY Mark M,
Inventor(s):
WHITNEY Mark M,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9840850 A2 19980917
Application: WO 98US4774 19980311 (PCT/WO US9804774)
Priority Application: US 9740555 19970313
Designated States: JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Main International Patent Class: G06F-013/00
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 27228

English Abstract
A system for, and method of, **off - loading** network **transactions** from a main frame to an intelligent input/output device, including off-loading message queueing facilities. A storage controller (102) has a processor and a memory, in which the controller receives I/O commands having corresponding addresses. In the controller memory, a communication stack (116) is provided for receiving and transmitting information on a network (106). In addition, a message queue facilities (MQF) (114) is provided that cooperates with the communication stack (116) and that is responsive to a message queue verb. The MQF (114) causes the communication stack (116) to provide information to a queue in the MQF or causes a queue in

the MQF to provide information to the communication stack (116). Moreover, interface logic (105) is provided in the controller memory and is responsive to the I/O commands, to determine whether an I/O command is within a first set of predetermined I/O commands. If so, the interface logic (105) maps the I/O command to a corresponding message queue verb and queue to invoke the MQF (114). In this fashion, the MQF (114) may cooperate with the communication stack (116) to send and receive information corresponding to the verb, while **off - loading** the **processing** from a computer client (e.g., a mainframe) of the storage controller.

French Abstract

L'invention concerne un systeme et un procede de transfert de transactions sur reseau, depuis un processeur central jusqu'a un dispositif d'entree/sortie intelligent, comprenant le transfert de fonctions de files d'attente de messages. Un dispositif de controle memoire comprend un processeur et une memoire, ce dispositif de controle recevant des commandes d'entree/sortie aux adresses correspondantes. Dans la memoire de ce dispositif de controle, une pile de communications recoit et transmet des informations sur un reseau. En outre, une fonction de file d'attente des messages (MQF) coopere avec ladite pile de communications, et repond a un verbe de file d'attente de messages. Par l'intermediaire de cette MQF, la pile de communications fournit des informations a une file d'attente de ladite MQF, ou une file d'attente de cette MQF fournit des informations a la pile de communications. La memoire du dispositif de controle comprend egalement une logique d'interface, qui repond aux commandes d'entree/sortie afin de determiner si une de ces commandes d'entree/sortie fait partie d'un premier ensemble de commandes d'entree/sortie predeterminees. Si tel est le cas, ladite logique d'interface etablit une correspondance entre la commande d'entree/sortie et un verbe de file d'attente de messages correspondant, et se met en attente pour solliciter la MQF. Dans ce mode de realisation, ladite MQF peut cooperer avec la pile de communications pour envoyer et recevoir des informations correspondant au verbe, tout en transferant le traitement depuis l'ordinateur (par exemple un processeur central) du dispositif de controle memoire.

Fulltext Availability:
Detailed Description

English Abstract

A system for, and method of, **off - loading** network **transactions** from a main frame to an intelligent input/output device, including off-loading message queueing facilities. A storage controller (102) has a processor and a...

...MQF (114). In this fashion, the MQF (114) may cooperate with the communication stack (116) to send and receive information corresponding to the verb, while **off - loading** the **processing** from a computer client (e.g., a mainframe) of the storage controller.

Detailed Description

... Figure 22 is a diagram illustrating the MQF message flow of a preferred
embodiment.

Detailed Desc7iption

The invention provides a system for, and method of, **off - loading** network
transactions to an intelligent I/O device. Preferred embodiments are particularly directed to **off - loading** MQF **operations** from a mainframe system. In addition to saving expensive mainframe computing cycles, the novel arrangement **allows** for novel uses of MQF in a mainframe context, such as shared queues among multiple mainframes in a cluster. Additionally, certain embodiments of the invention bridge mainframes and open systems, **permitting** the vast operational information that previously was tightly-housed in the mainframes to be selectively replicated into the more flexible open systems. The tight

integration **permits** operational systems and the decision support systems to operate with real-time event based feedback loops rather than daily, weekly, or monthly batch based feedback loops. It also **permits** the migration of applications from the mainframe environment to the opens systems when the business dictates.

Under preferred embodiments, mainframe software translates MQF calls to...

27/5,K/24 (Item 14 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00234266 **Image available**
DATA PROCESSING SYSTEM
SYSTEME DE TRAITEMENT DE DONNEES
Patent Applicant/Assignee:
INTEL CORPORATION,
Inventor(s):
SPRAGUE David Leroy,
HARNEY Kevin,
KOWASHI Eiichi,
KEITH Michael,
SIMON Allen Henry,
PAPADOPOULOS Gregory Michael,
HAYS Walter Patrick,
SALEM George Francis,
SHIUE Shih-Wei,
BERTAPELLI Anthony Paul,
SHILMAN Vitaly Haskel,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9308525 A2 19930429
Application: WO 92US9065 19921022 (PCT/WO US9209065)
Priority Application: US 91782332 19911024; US 92901378 19920619
Designated States: AT AU BB BG BR CA CH CS DE DK ES FI GB HU JP KP KR LK LU MG MN MW NL NO PL RO RU SD SE UA AT BE CH DE DK ES FR GB GR IE IT LU MC NL SE BF BJ CF CG CI CM GA GN ML MR SN TD TG
Main International Patent Class: G06F-009/30
International Patent Class: G06F-15:80; G06F-15:66
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 18784

English Abstract
Single-instruction multiple-data is a new class of integrated video signal processors especially suited for real-time processing of two-dimensional images. The single-instruction, multiple-data architecture is adopted to exploit the high degree of parallelism inherent in many video signal processing algorithms. Features have been added to the architecture which support conditional execution and sequencing - an inherent limitation of traditional single-instruction multiple-data machines. A separate transfer engine **offloads transaction processing** from the execution core, **allowing** balancing of input/output and compute resources - a critical factor in optimizing performance for video processing. These features, coupled with a scalable architecture **allow** a united programming model and application driven performance.

French Abstract
Les processeurs possedant une structure a instruction unique et donnees multiples constitue une nouvelle categorie de processeurs de signaux video integres qui convient particulierement au traitement en temps reel d'images bidimensionnelles. La structure a instruction simple et donnees multiples est adoptee pour exploiter le haut degre de parallelisme inherent a de nombreux algorithmes de traitement de signaux video. On a

ajoute a ladite structure des elements qui aident a l'execution et au sequencage conditionnels qu'il etait impossible de realiser avec les machines a instruction unique des donnees multiples classiques. Une machine de transfert separee decharge le traitement de transaction du noyau d'execution, ce qui permet un equilibrage des ressources d'entree, de sortie et de calcul. Cela represente un facteur critique de l'optimisation de l'execution du traitement de signaux video. Ces elements additionnels couples avec une structure evolutive permet une execution au moyen d'un modele unique de programmation et fondee sur l'application.

English Abstract

...been added to the architecture which support conditional execution and sequencing - an inherent limitation of traditional single-instruction multiple-data machines. A separate transfer engine **offloads transaction processing** from the execution core, **allowing** balancing of input/output and compute resources - a critical factor in optimizing performance for video processing. These features, coupled with a scalable architecture **allow** a united programming model and application driven performance.

```
File   8:Ei Compendex(R) 1970-2002/Oct W4
         (c) 2002 Engineering Info. Inc.
File  35:Dissertation Abs Online 1861-2002/Oct
         (c) 2002 ProQuest Info&Learning
File 202:Information Science Abs. 1966-2002/Oct 29
         (c) Information Today, Inc
File  65:Inside Conferences 1993-2002/Nov W1
         (c) 2002 BLDSC all rts. reserv.
File   2:INSPEC 1969-2002/Nov W1
         (c) 2002 Institution of Electrical Engineers
File 233:Internet & Personal Comp. Abs. 1981-2002/Oct
         (c) 2002 Info. Today Inc.
File  94:JICST-EPlus 1985-2002/Sep W1
         (c)2002 Japan Science and Tech Corp(JST)
File 111:TGG Natl.Newspaper Index(SM) 1979-2002/Nov 05
         (c) 2002 The Gale Group
File 603:Newspaper Abstracts 1984-1988
         (c)2001 ProQuest Info&Learning
File 483:Newspaper Abs Daily 1986-2002/Nov 06
         (c) 2002 ProQuest Info&Learning
File   6:NTIS 1964-2002/Nov W1
         (c) 2002 NTIS, Intl Cpyrght All Rights Res
File 144:Pascal 1973-2002/Nov W1
         (c) 2002 INIST/CNRS
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File  34:SciSearch(R) Cited Ref Sci 1990-2002/Nov W1
         (c) 2002 Inst for Sci Info
File  99:Wilson Appl. Sci & Tech Abs 1983-2002/Sep
         (c) 2002 The HW Wilson Co.
File 583:Gale Group Globalbase(TM) 1986-2002/Nov 07
         (c) 2002 The Gale Group
File 266:FEDRIP 2002/Sep
         Comp & dist by NTIS, Intl Copyright All Rights Res
File  95:TEME-Technology & Management 1989-2002/Oct W4
         (c) 2002 FIZ TECHNIK
File  62:SPIN(R) 1975-2002/Sep W5
         (c) 2002 American Institute of Physics
File 239:Mathsci 1940-2002/Dec
         (c) 2002 American Mathematical Society
File 438:Library Literature 1984-2002/Sep
         (c) 2002 The HW Wilson Co

Set     Items   Description
S1    9983422   FUNCTION? ? OR COMMAND? ? OR QUERY OR QUERIE? ? OR REQUEST?
               ? OR TRANSACTION? ? OR TASK? ? OR JOB? ? OR OPERATION? ? OR -
              PROCEDURE? ? OR DIRECTIVE? ?
S2     258717   S1(5N)(NODE? ? OR HOST? ? OR PC? ? OR COMPUTER? ? OR CLIEN-
              T? ? OR PROCESSOR? ? OR TERMINAL? ? OR DEVICE? ?)
S3       9639   (SECURITY OR CONFIDENTI? OR USAGE)(3N)(LEVEL? OR GRADE OR -
              GRADES OR STANDING OR RANK? OR RATING OR CLASS??)
S4    8316919   AUTHORIZ? OR AUTHORIS? OR PERMISSION? ? OR PERMIT? OR CLEA-
              RANCE? ? OR APPROV? OR ALLOW? OR RIGHT? ? OR PRIVILEGE? ? OR -
              ACCESS??? OR AUTHENTICAT? OR VERIF? OR VALIDAT? OR CREDENTIAL?
               ? OR ROLE? ?
S5    2190850   DISK? ? OR DISC? ? OR DISKETTE?? OR CDROM?? OR CD OR CDS OR
               DVD??? OR MINIDISK? ? OR MINIDISC? ? OR DRIVE OR DRIVES OR S-
              TORAGE OR PROXY
S6      57536   (RECORDING OR RECORDABLE OR WRITING OR WRITABLE OR WRITEAB-
              LE OR REPRODUCING OR REPRODUCIBLE OR REPRODUCTION OR STORING -
              OR STORE? ?)(3N)(MEDIUM? ? OR MEDIA OR SURFACE OR UNIT? ? OR -
              PROCESSOR? ? OR DEVICE? ?)
S7     830498   SERVER? ? OR WEBSERVER? ? OR DATABASE? ? OR DATA()BASE? ?
S8     165553   S3:S4(10N)S5:S7
S9      61459   S1(5N)S5:S6
S10     58069   S1(5N)S7
S11       117   S2 AND S8 AND S9 AND S10
S12        93   RD (unique items)
```

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S13          71   S12 NOT PY=2000:2002
S14        1798   NETWORK? ?(2N)ATTACH?(2N)(DISK? ? OR DISC? ? OR STORAGE) OR
                  (OFFLOAD??? OR OFF()LOAD???)(5N)(PROCESS? OR WORK OR S1)
S15         493   S3:S4 AND S14
S16         274   S1 AND S15
S17         117   S16 AND S5:S6
S18         102   RD (unique items)
S19          51   S18 NOT PY=2000:2002
S20          50   S19 NOT S13
```

13/5/3 (Item 3 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

05150954 E.I. No: EIP98114436021
Title: WebGroup: A secure group access control tool for the World-Wide Web
Author: Petitcolas, Fabien A.P.; Zhang, Kan
Corporate Source: Univ of Cambridge, Cambridge, UK
Conference Title: Proceedings of the 1998 7th IEEE International Workshops on Enabling Technologies: Infrastructure for Collaborative Enterprises, WET ICE
Conference Location: Stanford, CA, USA Conference Date: 19980617-19980619
Sponsor: IEEE
E.I. Conference No.: 49139
Source: Proceedings of the Workshop on Enabling Technologies: Infrastructure for Collaborative Enterprises, WET ICE 1998. IEEE Comp Soc, Los Alamitos, CA, USA,98TB100253. p 301-305
Publication Year: 1998
CODEN: PETEFZ
Language: English
Document Type: CA; (Conference Article) Treatment: T; (Theoretical)
Journal Announcement: 9812W4
Abstract: We present an integrated secure group access control tool to suppan workgroups on the World-Wide Web. The system enables user authentication, encrypted communication and fine-grained group **access** control. The tool comprises two proxies: one running on the **server** side and the other one on the client side. Typically the browser sends a **query** to the **client** side **proxy** which contacts the **server** side proxy for **authentication** , session key exchange and checking of **access rights** . The **server** side **proxy** finally forwards the **request** to the HTTP **server** . Our tool is completely transparent to the user and compatible with any Web server and browser. It can also become pan of a firewall configuration. (Author abstract) 7 Refs.
Descriptors: *Computer aided software engineering; World Wide Web; Data communication systems; Cryptography; Security of data; Client server computer systems; HTTP; Web browsers; Data acquisition
Identifiers: Fine-grained group access control
Classification Codes:
723.1 (Computer Programming); 723.5 (Computer Applications); 723.2 (Data Processing); 722.4 (Digital Computers & Systems)
723 (Computer Software); 722 (Computer Hardware)
72 (COMPUTERS & DATA PROCESSING)

13/5/4 (Item 4 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

05000388 E.I. No: EIP98044167449
Title: Performance comparison of three alternatives of distributed multidatabase systems: A global query perspective
Author: Chen, Chung-Min; Sun, Wei; Rishe, Naphtali
Corporate Source: Florida Int Univ, Miami, FL, USA
Conference Title: Proceedings of the 1998 IEEE International Performance, Computing and Communications Conference, IPCCC
Conference Location: Phoenix, AZ, USA Conference Date: 19980216-19980218
Sponsor: IEEE
E.I. Conference No.: 48243
Source: IEEE International Performance, Computing & Communications Conference, Proceedings 1998. IEEE, Piscataway, NJ, USA,98CH36191. p 53-59
Publication Year: 1998
CODEN: 002588
Language: English
Document Type: CA; (Conference Article) Treatment: T; (Theoretical)
Journal Announcement: 9806W3

Abstract: Diversity and evolution in database applications often result in a multidatabase environment in which corporate data are stored in multiple, distributed data sources, each managed by an independent database management system. One of the essential functions of a multidatabase system is to provide inter- **database access** : the capability of evaluating global queries that require **access** to multiple data sources. This paper compares three common relational multidatabase approaches: the federated approach, the gateway approach, and the middleware approach from the perspective of global query performance. In particular, we examine their architectural impact on the applicability of pipelined query processing techniques and load balancing. We present a performance comparison based on a detailed simulation. The study suggests that the middleware approach, which is the most cost-effective solution among the three, provides better or comparable performance to the other two approaches. (Author abstract) 13 Refs.

Descriptors: Distributed database systems; Data acquisition; Relational **database** systems; Pipeline processing systems; **Query** languages; **Storage** allocation (**computer**); **Computer** simulation

Identifiers: Multidatabase systems; Pipelined query processing techniques

Classification Codes:

723.3 (Database Systems); 723.2 (Data Processing); 722.4 (Digital Computers & Systems); 722.1 (Data Storage, Equipment & Techniques); 723.5 (Computer Applications)

723 (Computer Software); 722 (Computer Hardware)

72 (COMPUTERS & DATA PROCESSING)

13/5/11 (Item 11 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

04449889 E.I. No: EIP96073249512

Title: Design and implementation of a distributed database system

Author: Basumallick, Swagato; Wong, Johnny S.K.

Corporate Source: Iowa State Univ, Ames, IA, USA

Source: Journal of Systems and Software v 34 n 1 Jul 1996. p 21-29

Publication Year: 1996

CODEN: JSSODM ISSN: 0164-1212

Language: English

Document Type: JA; (Journal Article) Treatment: T; (Theoretical)

Journal Announcement: 9609W3

Abstract: This article describes the design, implementation, and testing of a set of software modules that are used for remote **database access** in a heterogeneous computer system. Such remote **access** of **databases** enables cost-effective use of resources, because it becomes possible to use specialized database engines for data storage and user-friendly interfaces (typically graphical) for data manipulation and database navigation. The goal of this research was to implement a **client - server** model using Structured **Query** Language **functions** using the sockets application programming interface. The **database functions** were implemented on an IBM AS/400, while the transmission control protocol/Internet protocol provided the communications support with graphical user interfaces acting as clients. (Author abstract) 13 Refs.

Descriptors: Software engineering; Distributed database systems; Data **storage** equipment; Graphical user interfaces; **Query** languages; Data structures; **Computer** programming; Network protocols

Identifiers: Software modules; Heterogeneous computer system; Database engines; Client server model; Sockets application programming interface

Classification Codes:

723.1.1 (Computer Programming Languages)

723.1 (Computer Programming); 723.3 (Database Systems); 722.1 (Data Storage, Equipment & Techniques); 722.2 (Computer Peripheral Equipment); 723.2 (Data Processing)

723 (Computer Software); 722 (Computer Hardware)

72 (COMPUTERS & DATA PROCESSING)

13/5/22 (Item 22 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

02512448 E.I. Monthly No: EI8802012258
Title: XINBASE, A DATABASE SYSTEM IN THE UNIX SHELL.
Author: Muthukrishnan, C. R.; Kumar, Jai
Source: TrAC, Trends in Analytical Chemistry (Personal Edition) v 6 n 9 Oct 1987 p 220-222
Publication Year: 1987
CODEN: TTAEDJ ISSN: 0165-9936
Language: ENGLISH
Document Type: JA; (Journal Article)
Journal Announcement: 8802
Abstract: Recent advances in implementing user-friendly systems advocate tools for rapid prototyping. Interactive **access** to a **database** using the relational model is a powerful basis on which to develop such a tool. This work presents an integrated set of tools using shell language under Unix and employs the utilities offered by it. The system, named XINBASE, is a flatfile database system. It combines the general Unix tools (commands) into specialized tools (operators) and is presented in a menu-driven, user-friendly environment. A number of Unix commands (60 of them) have been combined to emulate 21 basic **database operations** on the lines of the popular dBASE II package. Data are stored at two levels (pools) to allow for locking, security and simple error recoveries to be incorporated. XINBASE is designed to show that efficient application programs can be developed in the Unix environment. (Edited author abstract) 8 refs.
Descriptors: DATABASE SYSTEMS--*Relational; COMPUTER SYSTEMS, DIGITAL--Interactive **Operation** ; **COMPUTERS** --Operating **Procedures** ; DATA **STORAGE** , DIGITAL
Identifiers: XINBASE; UNIX SHELL; USER-FRIENDLY SYSTEMS; **DATABASE** INTERACTIVE **ACCESS** ; OPERATORS ORGANIZATION
Classification Codes:
723 (Computer Software); 722 (Computer Hardware)
72 (COMPUTERS & DATA PROCESSING)

13/5/23 (Item 23 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

02338732 E.I. Monthly No: EI8712121734
Title: RELATIONAL DATABASE MACHINE ARCHITECTURE BASED ON AN ATTACHED PROCESSOR APPROACH.
Author: Kitamura, Tadashi; Hayami, Haruo; Nakamura, Toshio; Inoue, Ushio
Corporate Source: NTT, Jpn
Source: Denki Tsushin Kenkyusho Kenkyu Jitsuyoka Hokoku v 36 n 5 1987 p 663-671
Publication Year: 1987
CODEN: DTKKAA ISSN: 0415-3200
Language: JAPANESE
Document Type: JA; (Journal Article) Treatment: A; (Applications); T; (Theoretical)
Journal Announcement: 8712
Abstract: A new database machine architecture is proposed for large relational databases. In this machine, various new techniques are adopted. The first is the parallel **disk access** method whereby relation is divided and stored onto several **disks** and **accessed** in parallel. On-the-fly search by intelligent **disk** Controllers (IDKC) is another. IDKC is dedicated hardware for selection, restriction and projection, and is attached to a general purpose **computer** . Join **operations** are divided into three phases: filtering, sorting and key-comparison, and executed in parallel and pipeline fashion utilizing a **database operation** accelerating **processor** (DAP). Based on the performance evaluation, this machine is expected to perform relational operations many times faster than main frame computers. (Author abstract) 7 refs. In Japanese.
Descriptors: *DATABASE SYSTEMS--*Relational; COMPUTER ARCHITECTURE
Identifiers: ATTACHED PROCESSOR; **DATABASE** MACHINE ARCHITECTURE; PARALLEL **DISK ACCESS** ; INTELLIGENT **DISK** CONTROLLERS; **DATABASE**

OPERATION ACCELERATING **PROCESSOR**
Classification Codes:
723 (Computer Software); 722 (Computer Hardware)
72 (COMPUTERS & DATA PROCESSING)

13/5/26 (Item 26 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

01302497 E.I. Monthly No: EIM8306-037861
Title: TRANSACTION **PROCESSING USING A RELATIONAL** DATA BASE .
Author: Batman, Ronald B.
Corporate Source: Sperry Univac, Roseville, Minn, USA
Conference Title: Proceedings of the 14th Hawaii International Conference on System Sciences. (Volume 1: Software Hardware, Decision Support Systems, Special Topics.)
Conference Location: Honolulu, Hawaii, USA Conference Date: 19810108
Sponsor: Univ of Hawaii, Honolulu, Hawaii, USA; Univ of Southwestern Louisiana, Lafayette, La, USA; ACM, New York, NY, USA
E.I. Conference No.: 01685
Source: Proceedings of the Hawaii International Conference on System Science 14th. Publ by Western Periodicals Co, North Hollywood, Calif, USA p 267-287
Publication Year: 1981
CODEN: PHISD7 ISSN: 0073-1129
Language: English
Document Type: PA; (Conference Paper)
Journal Announcement: 8306
Descriptors: *AIR TRANSPORTATION--*Computer Applications
Identifiers: **TRANSACTION** PROCESSING; RELATIONAL **DATA BASES** ; AIRLINES; FILE STRUCTURES; NETWORK STRUCTURES; DATA **STORAGE** ; LANGUAGE **COMMANDS** ; **HOST** I/O; **DISK ACCESSES**
Classification Codes:
431 (Air Transportation); 723 (Computer Software); 722 (Computer Hardware)
43 (TRANSPORTATION); 72 (COMPUTERS & DATA PROCESSING)

13/5/28 (Item 1 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online

01690541 ORDER NO: AAD99-19106
DATA SHARING IN INTERACTIVE CONTINUOUS MEDIA SERVERS (BUFFER SHARING, BATCHING, MULTIMEDIA SYSTEMS)
Author: SHI, WEIFENG
Degree: PH.D.
Year: 1998
Corporate Source/Institution: UNIVERSITY OF SOUTHERN CALIFORNIA (0208)
Adviser: SHAHRAN GHANDEHARIZADEH
Source: VOLUME 60/02-B OF DISSERTATION ABSTRACTS INTERNATIONAL. PAGE 721. 77 PAGES
Descriptors: COMPUTER SCIENCE
Descriptor Codes: 0984

In a continuous media server that supports the display of audio or video clips (e.g., a video-on-demand **server**), **requests** from different **clients** are independent of each other and may arrive at random time. Commercial systems may strive to support hundreds, if not thousands of clients. Assigning an individual disk stream for each client may require very high disk bandwidth from a server. This makes the disk bandwidth a bottleneck resource, restricting the number of concurrent displays. One solution is to introduce additional disk drives into the server, however, this might result in a significant system cost that would render the system economically inviable. In this dissertation, we propose novel data sharing techniques to resolve the disk bandwidth bottleneck while making the overall system more cost-effective.

We investigate two approaches: buffer sharing and batching. With buffer sharing, if one display of a clip lags another display of the same clip by a short time interval, then the portion between the two is retained in buffers to **allow** the lagging display to read data from buffers with no **disk access** . We propose a buffer sharing scheme that strikes a balance in trading memory for disk bandwidth to prevent system bottlenecks (either memory or disk bandwidth). Moreover, this scheme minimizes the system cost to meet a prespecified performance objective. With batching, requests are delayed in the hope of being merged with other requests for the same clip. These merged requests then form a batch and consume only one disk stream. We investigate environments that equip the client with local storage device (e.g., rewritable DVD) to achieve data sharing among batches and support VCR **operations** . The local **client storage** reduces the disk bandwidth requirement at server side dramatically, however, it requires more resource (both disk bandwidth and memory) at client side which may diminish the cost-effectiveness of the environment. When compared with each other, batching with local storage distributes resources into each client, whereas buffer sharing centralizes resources in the server. This dissertation demonstrates that buffer sharing is a more cost-effective solution.

13/5/29 (Item 2 from file: 35)

01598998 ORDER NO: AAD98-01013
THE DESIGN AND IMPLEMENTATION OF A DISTRIBUTED FILE SYSTEM BASED ON SHARED NETWORK STORAGE (NETWORK INTERFACE)
Author: SOLTIS, STEVEN RANDEL
Degree: PH.D.
Year: 1997
Corporate Source/Institution: UNIVERSITY OF MINNESOTA (0130)
Major Adviser: MATTHEW O'KEEFE
Source: VOLUME 58/07-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 3838. 111 PAGES
Descriptors: ENGINEERING, ELECTRONICS AND ELECTRICAL ; COMPUTER SCIENCE
Descriptor Codes: 0544; 0984

Distributed file systems allow users to access and share files from any computer connected to the distributed system. Distributed file systems typically do not achieve the same level of performance that local file systems provide due to the demands of resource sharing. For workloads with large storage capacity requirements, poor performance of distributed file systems often overshadows the benefits of transparent file sharing.

Traditional network and channel interfaces differ in performance, connectivity, and connection distance. By merging network and channel interfaces, resulting interfaces **allow** multiple computers to physically share **storage devices** . **Computers** service local file **requests** directly from network attached **storage devices** . Direct device **access** eliminates **server** machines as bottlenecks to performance and availability. Communication is unnecessary between computers, since each machine views storage as locally attached.

This dissertation presents a distributed file system design based on a shared network storage architecture. The architecture distributes user workloads and file system resources across the entire system. **Functions** once performed by **server computers** are redistributed to clients and storage devices. The design brings responsibilities, such as caching and consistency management, closer to hardware, so that these functions execute faster and more reliably.

The Global File System (GFS) is a distributed file system prototype built upon Fibre Channel networks. GFS is implemented in the Silicon Graphics IRIX operating system and is accessed using standard UNIX commands and utilities. GFS uses a consistency mechanism that is prototyped on Seagate disk drives and Ciprico disk arrays. This dissertation describes the architecture and implementation of the file system design. Performance analysis is given for the file system prototype in large data demand environments.

13/5/31 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC

6113530 INSPEC Abstract Number: B9902-7550-005, C9902-7140-012
Title: DICOM-compliant PACS with CD-based image archival
Author(s): Cox, R.D.; Henri, C.J.; Rubin, R.K.; Bret, P.M.
Author Affiliation: Dept. of Diagnostic Radiol., McGill Univ., Montreal, Que., Canada
Journal: Proceedings of the SPIE - The International Society for Optical Engineering Conference Title: Proc. SPIE - Int. Soc. Opt. Eng. (USA) vol.3339 p.135-42
Publisher: SPIE-Int. Soc. Opt. Eng,
Publication Date: 1998 Country of Publication: USA
CODEN: PSISDG ISSN: 0277-786X
SICI: 0277-786X(1998)3339L.135:DCPW;1-9
Material Identity Number: C574-98227
U.S. Copyright Clearance Center Code: 0277-786X/98/$10.00
Conference Title: Medical Imaging 1998: PACS Design and Evaluation: Engineering and Clinical Issues
Conference Sponsor: SPIE
Conference Date: 24-26 Feb. 1998 Conference Location: San Diego, CA, USA
Language: English Document Type: Conference Paper (PA); Journal Paper (JP)
Treatment: Practical (P)
Abstract: Describes the design and implementation of a low-cost PACS conforming to the DICOM 3.0 standard. The goal was to provide an efficient image archival and management solution on a heterogeneous hospital network as a basis for filmless radiology. The system follows a client/ **server** model. It provides reliable archiving on recordable **CD** and **allows access** to digital images throughout the hospital and on the Internet. Dedicated servers have been designed for short-term **storage** , **CD** -based archiving, data retrieval and remote data **access** or teleradiology. The system employs lossless compression on the **storage** devices. All servers communicate via the DICOM protocol in conjunction with both local and master SQL patient databases. Records are transferred from the local to the master database independently, ensuring that **storage devices** still **function** if the master **database server** cannot be reached. The system features rule-based workflow management and WWW **servers** to provide multi-platform remote data **access** . The WWW **server** system is distributed on the **storage** , retrieval and teleradiology **servers allowing** viewing of locally stored image data directly in a WWW browser without the need for data transfer to a central WWW server. An independent system monitors disk usage, processes, network and CPU load on each server and reports errors to the image management team via e-mail. The system has enabled filmless operation in CT, MRI and US throughout the hospital. The use of WWW technology has enabled the development of an intuitive solution that provides complete access to image data. (4 Refs)
Subfile: B C
Descriptors: biomedical communication; CD-ROMs; client-server systems; file servers; information resources; PACS; radiology; telecommunication standards; telemedicine; visual databases; workflow management software
Identifiers: DICOM-compliant PACS; CD-based image archival; DICOM 3.0 standard; image archiving; image management; heterogeneous hospital network ; filmless radiology; client/server model; recordable CD; Internet; dedicated servers; short-term storage; data retrieval; remote data access; teleradiology; lossless compression; SQL; patient databases; relational databases; record transfer; rule-based workflow management; multi-platform remote data access; World Wide Web server system; Web browser; disk usage monitoring; process monitoring; network monitoring; CPU load monitoring; error reporting; electronic mail; computerized tomography; MRI; ultrasound
Class Codes: B7550 (Biomedical communication); B6210L (Computer communications); B4120 (Optical storage and retrieval); C7140 (Medical administration); C5260B (Computer vision and image processing techniques); C5620L (Local area networks); C6160S (Spatial and pictorial databases); C5320K (Optical storage); C5630 (Networking equipment); C7210N (

Information networks); C7330 (Biology and medical computing)

13/5/34 (Item 4 from file: 2)
DIALOG(R)File 2:INSPEC

4494867 INSPEC Abstract Number: C9311-6150N-022
Title: Network access to CD -ROMs
Author(s): McCoy, J.H.; Wuhsiung Lu
Author Affiliation: Math. & Inf. Sci. Fac., Sam Houston State Univ., Huntsville, TX, USA
Journal: Dr. Dobb's Journal vol.18, no.8 p.72, 74, 78-80, 113
Publication Date: Aug. 1993 Country of Publication: USA
CODEN: DDJSDM ISSN: 1044-789X
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: To provide **access** to **CD** -ROMs across a NetBIOS-based network, the authors implemented a client/server architecture which supports file redirection and ancillary MSCDEX **functions** . MSCDEX runs on each **client** workstation along with a pseudo CD-ROM driver that accepts normal **CD** -ROM driver **requests** from MSCDEX. These requests are transmitted MSCDEX. These requests are transmitted over the network to a pseudo redirector on a **server** , which then submits the **request** to a bona fide **CD** -ROM device driver. The response from the CD-ROM is returned via the network to the client pseudo-driver that, in turn, responds to MSCDEX. So long as the client pseudo CD-ROM driver responds appropriately, MSCDEX is unaware that the actual drives are located on a remote machine. (0 Refs)
Subfile: C
Descriptors: Ada listings; CD-ROMs; distributed processing; microcomputer applications; network operating systems
Identifiers: MS-DOS CD-ROM Extensions; Ada programs; NetBIOS-based network; client/server architecture; file redirection; MSCDEX; pseudo CD-ROM driver; device driver
Class Codes: C6150N (Distributed systems); C5320K (Optical storage)

13/5/38 (Item 8 from file: 2)
DIALOG(R)File 2:INSPEC

02645003 INSPEC Abstract Number: C86024961
Title: Shared disks for RSX-RSX
Author(s): van den Hoven, F.G.P.
Author Affiliation: FOM-Inst. voor Plasmafysica, Nieuwegein, Netherlands
Conference Title: Proceedings of the Digital Equipment Computer Users Society 1985 DECUS Europe Symposium p.305-12
Publisher: Digital Equipment Corp, Marlboro, MA, USA
Publication Date: 1985 Country of Publication: USA v+468 pp.
Conference Date: 16-20 Sept. 1985 Conference Location: Cannes, France
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: A software package employing a high speed connection of two PDP11 systems under RSX11M/M-PLUS, gives a guest system **access** to any file on the **disks** of the host system. A user written ACP plus one driver for each connected disk, are responsible for the interception of FILES-11 and I/O **requests** directed to the non-local **disks** . A server **task** running at the host executes the requested I/O **functions** from and towards real **disks** . Application programs and all utilities can **access** files as if they worked at a local **disk** , and do not need any modification. The author highlights the design issues of the associated drivers, the ACP and the **server task** . Its usage over a period of more than one year serves as a basis for an evaluation of the security and performance of the software. (0 Refs)
Subfile: C
Descriptors: DEC computers; file organisation; magnetic disc storage;

operating systems (computers)
Identifiers: shared disks; DEC; RSX-RSX; software package; high speed connection; PDP11 systems; RSX11M/M-PLUS; host system; FILES-11; I/O requests; **server task** ; security; performance
Class Codes: C5320C (Storage on moving magnetic media); C6120 (File organisation); C6150J (Operating systems)

13/5/44 (Item 3 from file: 233)
DIALOG(R)File 233:Internet & Personal Comp. Abs.

00402412 95NC11-009
Designing database access **over low-speed links**
Fleck, Rod
Network Computing , November 1, 1995 , v6 n14 p112-116, 3 Page(s)
ISSN: 1046-4468
Languages: English
Document Type: Feature Articles and News
Geographic Location: United States
Discusses the options for connecting a remote user to a corporate database over low-speed links. Says minimizing the amount of data server and the remote client to minimize the time the link is operational involves either using a client-proxy server, configuring a modem into a network card, or providing replication. Explains that a client- **proxy server** will pre-digest remote **queries** , while a remote **node** modem makes the client another node on the network, and replication links the remote site or user to a local replica of the database. Adds that the actual solution will depend on cost, scalability, and the nature of the business requirement. Also says each option has it own drawbacks and complications that make it impossible to use in all situations. Includes three diagrams. (dpm)
Descriptors: Remote Computing; Data Base Management; Data Transmission ; Network Management

13/5/45 (Item 4 from file: 233)
DIALOG(R)File 233:Internet & Personal Comp. Abs.

00396061 95WN09-039
Processing power: Part 2--Intro to Multiprocessors -- Symmetric multiprocessing servers **perform many** tasks **at once, serve many users at once and process many** disk access requests **at once.**
Heller, Martin
Windows Magazine , September 1, 1995 , v6 n10 p192-196, 5 Page(s)
ISSN: 1060-1066
Languages: English
Document Type: Feature Articles and News
Geographic Location: United States
This second part of a three-part series covers the use of symmetric multiprocessing (SMP) for network servers. Explains that SMP **servers** perform many **tasks** simultaneously, and that the individual **processors** in an SMP system are identical and are linked at bus speed, often exceeding 100MB/sec. Notes that each CPU often has its own SRAM cache of up to several MB, and that typical SMP computers have at least 32MB RAM, with some able to have 256MB. Considers factors in deciding whether an SMP is an appropriate solution to certain users. These factors include software, where built-in multiprocessor support such as in Windows NT or certain versions of Unix could benefit from SMP. Attention is given to massively parallel systems; asymmetric multiprocessor machines; scaling factors with additional CPUs; efficient cache synchronization; threaded software; scheduling; and having sufficient RAM. (jo)
Descriptors: Multiprocessing; Network Server; Networks; Parallel Processing

13/5/54 (Item 7 from file: 6)

DIALOG(R)File 6:NTIS

1154103 NTIS Accession Number: AD-A148 750/3
Design and Analysis of an Access Control System for a Multi-Backend Database System
(Master's thesis)
Ekici, A.
Naval Postgraduate School, Monterey, CA.
Corp. Source Codes: 019895000; 251450
Jun 84 114p
Languages: English Document Type: Thesis
Journal Announcement: GRAI8506
Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
NTIS Prices: PC A06/MF A01
Country of Publication: United States
This thesis describes the design and analysis of an **access** control mechanism for a multi-backend **database** system (MDBS). The MDBS utilizes a minicomputer as the controller and a number of minicomputers and their disk systems as the backends. The database is distributed over the dedicated **disk** systems of the backends. The **operations** on the **database** are performed by the backends in parallel. Thus, the performance gain of the system is dependent on the number of backends in the system. Each backend performs its own access control operations using duplicated access control information.
Descriptors: **Data bases** ; *Parallel processing; Systems engineering; **Access** ; Control systems; Minicomputers; Data management; Data **storage** systems; Performance(Engineering); Distributed data processing; Disks; Theses
Identifiers: *Backend processors; Multi Backend Database System; MCBS system; NTISDODXA
Section Headings: 62B (Computers, Control, and Information Theory--Computer Software); 62A (Computers, Control, and Information Theory--Computer Hardware); 88B (Library and Information Sciences--Information Systems); 88A (Library and Information Sciences--Operations and Planning)

13/5/56 (Item 9 from file: 6)
DIALOG(R)File 6:NTIS

0859818 NTIS Accession Number: AD-A090 313/8/XAB
The Design and Implementation of the Memory Manager for a Secure Archival Storage System
(Master's thesis)
Moore, E. E. ; Gary, A. V.
Naval Postgraduate School, Monterey, CA.
Corp. Source Codes: 019895000; 251450
Jun 80 166p
Languages: English Document Type: Thesis
Journal Announcement: GRAI8104
Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
NTIS Prices: PC A08/MF A01
Country of Publication: United States
This thesis presents a detailed design and implementation of a memory manager for a kernel technology based secure archival storage system (SASS). The memory manager is a part of the non-distributed portion of the Security Kernel, and is solely responsible for the proper management of both the main memory (random **access**) and the secondary **storage** (direct **access**) of the system. The memory manager is designed for implementation on the ZILOG Z8000 microprocessor in a multi-processor environment. The

loop free design structure, based upon levels of abstraction, and a segment aliasing scheme for information confinement are essential elements of the overall system security provided by the SASS. (Author)

Descriptors: Data **storage** systems; *Computer programming; *Data processing security; *Random access **computer storage** ; *Archives; **Computer** files; Kernel **functions** ; Microprocessors; Multiprocessors; Specifications; **Computer** communications; **Data bases** ; Man computer interface; Computer programs; Input output processing; Flow charting; Theses

Identifiers: *Memory management system; Z8000 microprocessor; Distributed data processing; Operating systems(Computers); NTISDODXA

Section Headings: 62B (Computers, Control, and Information Theory--Computer Software)

13/5/58 (Item 2 from file: 144)

DIALOG(R)File 144:Pascal

12898915 PASCAL No.: 97-0164438

A distributed hierarchical storage manager for a video-on-demand system

Storage and retrieval for image and video databases II : San Jose CA, 7-8 February 1994

FEDERIGHI C; ROWE L A

NIBLACK Wayne, ed; JAIN Ramesh C, ed

Computer Science Division - EECS, University of California, berkeley, CA 94720, United States

International Society for Optical Engineering, Bellingham WA, United States.

Storage and retrieval for image and video databases. Conference, 2 (San Jose CA USA) 1994-02-07

Journal: SPIE proceedings series, 1994, 2185 185-198

ISSN: 1017-2653 Availability: INIST-21760; 354000055523450170

No. of Refs.: 25 ref.

Document Type: P (Serial); C (Conference Proceedings) ; A (Analytic)

Country of Publication: United States

Language: English

The design of a distributed video-on-demand system that is suitable for large video libraries is described. The system is designed to store 1000s of hours of video material on tertiary storage devices. A video that a user wants to view is loaded onto a video file server close to the users desktop from where it can be played. The system manages the distributed cache of videos on the file **servers** and schedules load **requests** to the tertiary **storage devices** . The system also includes a metadata database, described in a companion paper, that the user can query to locate video material of interest. This paper describes the software architecture, storage organization, application protocols for locating and loading videos, and distributed cache management algorithm used by the system.

English Descriptors: Information system; Audiovisual; Information retrieval ; Moving image; Image **storage** ; Distributed system; System description; Implementation; System architecture; Document **access** ; Automatic system; Video cassette

French Descriptors: Systeme information; Audiovisuel; Recherche information ; Image mobile; Stockage image; Systeme reparti; Description systeme; Implementation; Architecture systeme; Acces document; Systeme automatique ; Cassette video; Banque video; Stockage hierarchique; A la demande

Classification Codes: 001A01F05; 205

13/5/60 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

02534757 Genuine Article#: LJ673 Number of References: 12
Title: THE CHANGING NATURE OF DISK CONTROLLERS
Author(s): HOSPODOR AD; HOAGLAND AS
Corporate Source: SANTA CLARA UNIV,INST INFORMAT STORAGE TECHNOL/SANTA CLARA//CA/95053; SANTA CLARA UNIV,SCH ENGN/SANTA CLARA//CA/95053
Journal: PROCEEDINGS OF THE IEEE, 1993, V81, N4 (APR), P586-594
ISSN: 0018-9219
Language: ENGLISH Document Type: ARTICLE
Geographic Location: USA
Subfile: SciSearch; CC ENGI--Current Contents, Engineering, Technology & Applied Sciences
Journal Subject Category: ENGINEERING, ELECTRICAL & ELECTRONIC
Abstract: The introduction of disk drive storage devices in 1956 marked the beginning of a revolution in information processing. The **disk drive** led the dramatic growth in computing systems applications, allowing **data base transaction** processing to occur on-line and in real time. This paper focuses on the evolution of the disk controllers that interface these storage devices and subsystems with their hosts. With magnetic disk storage density increasing by over five orders of magnitude in 37 years, the nature of the controller and its functions has undergone a significant change. Further, advances in disk technology will progress, at least through the next decade, at this historical or an even faster rate. In the 1960s, introduction of the IBM 360 and then 370 systems led to architectures oriented to main-frame systems. In the 1980s, the personal computer brought into being the single board controller most frequently attached to a single hard **disk drive** . In this decade, the **functions** being included within the **drive** are radically changing the attachment of a drive to a system. This paper traces the historical evolution and future trends in interfacing disk storage devices to host systems.
Descriptors--Author Keywords: CONTROLLER ; HARDWARE AND SOFTWARE USED TO CONTROL THE **OPERATION** OF DATA **STORAGE** ; **DEVICE** CONTROLLER ; A CONTROLLER INTIMATELY TIED TO THE **OPERATION** OF A SINGLE **STORAGE DEVICE** ; DASD ; DIRECT **ACCESS STORAGE** DEVICE, OR **DISK DRIVE** ; **DISK** ; A THIN **DISK** , TYPICALLY ALUMINUM, COATED WITH MAGNETIC MATERIAL ; DISK DRIVE ; DISK, HEAD, AND ASSOCIATED CONTROLLER (AKA DASD) ; HEAD ; RECORDING ELEMENT USED TO READ OR WRITE INFORMATION ONTO DISK ; HOST ; INITIATOR OF DISK ACTIVITY, THE CENTRAL PROCESSING UNIT (CPU) AND MAIN MEMORY ; INTERFACE ; METHOD TO TRANSPORT DATA BETWEEN HOST AND DISK DRIVE ; **STORAGE** CONTROLLER ; A CONTROLLER OVERSEEING THE **OPERATION** OF ONE OR MORE **DEVICES** SIMULTANEOUSLY
Cited References:
IBM 305 RAMAC REFERE, 1958
ARNETT PC, 1992, V28, P1984, IEEE T MAGN
COLEMAN S, 1993, V81, APR P IEEE
GLOVER N, 1988, P158, PRACTICAL ERROR CORR
HOAGLAND AS, 1991, EVOLUTION REVOLUTION
HOSPODOR A, 1992, IEEE COMPCON SAN FRA
KATZ R, 1993, V81, APR IEEE P
MATTSON RL, 1971, V7, P814, IEEE T MAGN
MENON J, 1988, V2539, P146, DIGEST IEEE COMPC CH
QUINN EP, 1990, P COMPUT MEASUREMENT
WAGNER JA, 1983, V19, P1686, IEEE T MAGN
ZAHORJAN J, 1978, V16, P199, INFORM

13/5/69 (Item 6 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management

00882070 E95044569080
Efficient access **to FDM objects stored in a relational** database
(Effizienter Zugriff zu FDM-Objekten, die in einer Relationsdatenbank gespeichert sind)
Kemp, GJL; Iriarte, JJ; Gray, PMD
Univ. of Aberdeen, GB
BNCOD 12, Directions in Databases, 12th British Nat. Conf. on Databases, Guildford, GB, Jul 6-8, 19941994

Document type: Conference paper Language: English
Record type: Abstract
ISBN: 3-540-58235-5; 0-387-58235-5

ABSTRACT:
The P/FDM object-oriented database is based on the functional data model and has a modular design, **allowing** alternative kinds of object **storage** to be used. This is achieved by implementing a small set of basic data **access** and update routines for each kind of **storage** module. In this work, a relational database management system has been used to provide object **storage** , and the authors describe how the data **access** routines have been implemented. The principal query language used with P/FDM is Daplex, which is normally translated to Prolog, including calls to the basic data access routines. The query is optimised to minimise the expected number of calls. This gives very general method execution and patterns matching search .However, much better performance can be achieved for simpler data-intensive Daplex **queries** against a relational **storage** module by translating these to a single SQL statement. They describe a program called DAPSTRA which performs this translation quickly in a fashion transparent to the user, and compare performance.

DESCRIPTORS: RELATIONAL DATABASES; DATA MODELS; **DATABASE** MANAGEMENT SYSTEM; OBJECT ORIENTED PROGRAMMING; **QUERY** LANGUAGES; **COMPUTER** PERFORMANCE; PERFORMANCE ANALYSIS; IMPROVEMENT; OBJECT ORIENTED DATABASES
IDENTIFIERS: ABFRAGEOPTIMIERUNG; objektorientierte Datenbank; Zugriffsoptimierung

20/5/1 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

05167376 E.I. No: EIP98114476927
Title: Network attached storage **system criteria**
Author: Kramer, Jay
Corporate Source: Creative Design Solutions, Inc, Santa Clara, CA, USA
Source: Storage Management Solutions v 3 n 5 1998. p 44-48
Publication Year: 1998
CODEN: SMSOFD
Language: English
Document Type: JA; (Journal Article) Treatment: G; (General Review)
Journal Announcement: 9901W3
Abstract: In choosing a **network attached storage** (NAS) system, it is important to set expectations that address the full spectrum of personnel within the company. It is up to the NAS vendors to provide the best in class products, service and support to meet these expectations. End users have no desire to manage the data but require fast **access** to information whenever it is needed. The **operations** staff requires ease of data management with security and recovery of the environment. It desires the highest levels of availability and performance to meet the users' objectives. The management must, therefore, invest in the tools necessary to turn company data into tactical and strategic information for decision making to achieve employee productivity and effectiveness.
Descriptors: Data **storage** equipment; Network protocols; Interfaces (computer); Electric network topology; Security of data; Cost effectiveness ; Information management; Decision making
Identifiers: **Network attached storage** (NAS) systems criteria; Total cost of ownership (TCO); Multi-platform file sharing; Multi- **level security**
Classification Codes:
722.1 (Data Storage, Equipment & Techniques); 722.2 (Computer Peripheral Equipment); 703.1 (Electric Networks); 723.2 (Data Processing) ; 911.2 (Industrial Economics)
722 (Computer Hardware); 723 (Computer Software); 703 (Electric Circuits); 911 (Industrial Economics)
72 (COMPUTERS & DATA PROCESSING); 70 (ELECTRICAL ENGINEERING); 91 (ENGINEERING MANAGEMENT)

20/5/5 (Item 5 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

05005155 E.I. No: EIP98044175525
Title: Task **force on** network storage **architecture: Internet-** attached storage **devices**
Author: Van Meter, Rodney; Hotz, Steve; Finn, Gregory G.
Corporate Source: Univ of Southern California, Marina Del Rey, CA, USA
Conference Title: Proceedings of the 1997 30th Annual Hawaii International Conference on System Sciences. Part 1 (of 6)
Conference Location: Wailea, HI, USA Conference Date: 19970107-19970110
Sponsor: IEEE
E.I. Conference No.: 48272
Source: Software Technology and Architecture Proceedings of the Hawaii International Conference on System Sciences v 1 1997. IEEE Comp Soc, Los Alamitos, CA, USA,97TB100234. p 726
Publication Year: 1997
CODEN: PHISD7 ISSN: 1060-3425
Language: English
Document Type: CA; (Conference Article) Treatment: G; (General Review)
Journal Announcement: 9806W4
Abstract: The wide area connectivity that is Internet protocol (IP)'s strength opens up new functionality for peripherals. Cross-media bridging can be useful in heterogeneous computing environments, **allowing** transparent interoperation of different types of networks. IP makes use of the large existing body of research and development in routing, congestion

control, flow control and reliability. This reduces R&D effort, as well as **allowing** quick integration of emerging features such as resource reservation and real-time protocols. It also alleviates the problem of committing to a protocol suite which is more or less tied to a choice of physical media providing a growth path unconstrained by the future development of a particular technology.
Descriptors: Digital **storage** ; Computer architecture; Wide area networks ; Network protocols; Interactive computer systems
Identifiers: **Network storage** architecture; Internet **attached storage** devices; Internet protocols (IP)
Classification Codes:
722.1 (Data Storage, Equipment & Techniques); 722.3 (Data Communication, Equipment & Techniques); 722.4 (Digital Computers & Systems)
722 (Computer Hardware); 723 (Computer Software)
72 (COMPUTERS & DATA PROCESSING)

20/5/6 (Item 6 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

05005154 E.I. No: EIP98044175524
Title: Task **force on** network storage **architecture**: Network attached storage **is inevitable**
Author: Anderson, Dave
Corporate Source: Seagate Technology Inc, Bloomington, MN, USA
Conference Title: Proceedings of the 1997 30th Annual Hawaii International Conference on System Sciences. Part 1 (of 6)
Conference Location: Wailea, HI, USA Conference Date: 19970107-19970110
Sponsor: IEEE
E.I. Conference No.: 48272
Source: Software Technology and Architecture Proceedings of the Hawaii International Conference on System Sciences v 1 1997. IEEE Comp Soc, Los Alamitos, CA, USA,97TB100234. p 725
Publication Year: 1997
CODEN: PHISD7 ISSN: 1060-3425
Language: English
Document Type: CA; (Conference Article) Treatment: G; (General Review)
Journal Announcement: 9806W4
Abstract: Networked attached **storage** is seen as being a common means of **storage** connection and **access** by the year 2000. There are four reasons why system suppliers, and their customers, find this direction in **storage** attachment to be **right** for large segments of the computer systems market: **network attached storage** lends itself to better scalability than the traditional approach of **storage attached** via a local channel; **network attached storage** supports superior fault tolerant models by making the availability of each element independent of the availability of any other; **network attached storage** continues the industry direction toward increasingly open system architectures; and applications such as video delivery that make networked attached **storage** compelling.
Descriptors: Digital **storage** ; Computer architecture; Computer networks; Computer systems
Identifiers: **Network storage** architecture; **Network attached storage**
Classification Codes:
722.1 (Data Storage, Equipment & Techniques); 722.4 (Digital Computers & Systems)
722 (Computer Hardware); 723 (Computer Software)
72 (COMPUTERS & DATA PROCESSING)

20/5/11 (Item 11 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

04138329 E.I. No: EIP95012512228
Title: Laser-printer controller eases memory demands

Author: Nass, Richard
Source: Electronic Design v 42 n 22 Oct 25 1994. p 139-140
Publication Year: 1994
CODEN: ELODAW ISSN: 0013-4872
Language: English
Document Type: JA; (Journal Article) Treatment: A; (Applications); G; (General Review)
Journal Announcement: 9506W3
Abstract: Destiny Technology Corp of Santa Clara, CA, has produced the D5001 image and band-rendering processor, a laser-printer controller using compression techniques that have led to laser-printers with lower prices and higher performance. The D5001 is a combination compression/decompression and graphics coprocessor that improves overall efficiency by **offloading** the draw and fill **functions** from the printer's resident RISC processor. It can handle resolution up to 1200 dots/in, and is compatible with Intel's 960SX, KX, JX, and CX series of processors. Moreover, the chip supports PCL 5E, color PostScript and Roman and Kanji characters.
Descriptors: Printers (computer); Digital control systems; Image compression; Random **access storage** ; **Storage** allocation (computer); Algorithms; Reduced instruction set computing; Computer graphics; Data compression; Buffer circuits
Identifiers: Laser printer controller; Font compression; Band compression ; Graphics processor; Compression engine
Classification Codes:
722.2 (Computer Peripheral Equipment); 731.2 (Control System Applications); 723.2 (Data Processing); 722.1 (Data Storage, Equipment & Techniques); 722.4 (Digital Computers & Systems); 723.5 (Computer Applications)
722 (Computer Hardware); 731 (Automatic Control Principles); 723 (Computer Software)
72 (COMPUTERS & DATA PROCESSING); 73 (CONTROL ENGINEERING)

20/5/13 (Item 13 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

01994789 E.I. Monthly No: EI8607057356 E.I. Yearly No: EI86032092
Title: DATABASE ACCELERATOR SYSTEM RELIEVES SORTING BOTTLENECKS.
Author: Foley, Walter A.
Corporate Source: Accel Technologies, San Diego, CA, USA
Source: Computer Design v 25 n 3 Feb 1 1986 p 57-61
Publication Year: 1986
CODEN: CMPDAM ISSN: 0010-4566
Language: ENGLISH
Document Type: JA; (Journal Article) Treatment: A; (Applications); G; (General Review)
Journal Announcement: 8607
Abstract: Since the first data base was installed on a computer, the burden placed on CPU and I/O capability and mass **storage** capacity has prevented the database user from taking advantage of all the possibilities for **accessing** and ordering files. A database accelerator system, acting as a peripheral coprocessor, lets time-consuming sorting **tasks** be **off - loaded** from the host CPU. For applications ranging from traditional data bases to engineering implementations, the business, scientific and manufacturing communities can reap considerable benefits from this peripheral device.
Descriptors: *DATABASE SYSTEMS--*Performance; COMPUTER SYSTEMS PROGRAMMING--Sorting; COMPUTER PERIPHERAL EQUIPMENT
Identifiers: DATABASE ACCELERATOR SYSTEM
Classification Codes:
723 (Computer Software); 722 (Computer Hardware)
72 (COMPUTERS & DATA PROCESSING)

20/5/14 (Item 14 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

01969256 E.I. Monthly No: EI8605037373 E.I. Yearly No: EI86024051
Title: INTERFACE BETWEEN A HOST PROCESSOR AND AN I/O PROCESSOR IN A MULTIPROCESSOR SYSTEM.
Author: Anon
Source: IBM Technical Disclosure Bulletin v 28 n 9 Feb 1986 p 4014-4016
Publication Year: 1986
CODEN: IBMTAA ISSN: 0018-8689
Language: ENGLISH
Document Type: JA; (Journal Article) Treatment: A; (Applications)
Journal Announcement: 8605
Abstract: This article describes a method of interface control between a control **storage** processor (CSP) - host) and a file **storage** processor (FSP - I/O processor). Processor-to-processor communication, where one is an input/output (I/O) **processor** , requires speed and efficiency to **offload** the CPU cycle loads. Because **processing** time is an important factor in the **operation** of computer systems, this article describes a method of **offloading** the host **processor** to increase system response time and functional capabilities. Without the FSP (I/O processor), the **disk** and **diskette** are connected directly to the CSP channel. With the FSP, the **disk** , **diskette** , and tape exist under the FSP. With these I/O devices under the FSP, we reduce the CPU cycle loading on the CSP. The interface between the CSP and the FSP is controlled by using interrupts and status bits that can be **accessed** by both processors. Whenever a status bit is set, an interrupt to one of the processors is initiated.
Descriptors: *COMPUTER SYSTEMS, DIGITAL--*Multiprocessing; COMPUTER OPERATING SYSTEMS--Computer Interfaces
Identifiers: HOST PROCESSOR; I/O PROCESSOR; INTERFACE CONTROL; CONTROL **STORAGE** PROCESSOR; FILE **STORAGE** PROCESSOR
Classification Codes:
722 (Computer Hardware); 723 (Computer Software)
72 (COMPUTERS & DATA PROCESSING)

20/5/18 (Item 1 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online

01813286 ORDER NO: AADAA-I3002738
Security for a high performance commodity storage **subsystem**
Author: Gobioff, Howard Bradley
Degree: Ph.D.
Year: 1999
Corporate Source/Institution: Carnegie-Mellon University (0041)
Chairs: Garth Gibson; Doug Tygar
Source: VOLUME 62/01-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 331. 205 PAGES
Descriptors: COMPUTER SCIENCE
Descriptor Codes: 0984
ISBN: 0-493-11603-6

How do we incorporate security into a high performance commodity **storage** subsystem? Technology trends and the increasing importance of I/O bound workloads are driving the development of commodity **network attached storage** devices which deliver both increased functionality and increased performance to end-users. In the **network attached** world, **storage** devices co-exist on the network with their clients, application filemanagers, and malicious adversaries who seek to bypass system security policies. As **storage** devices move from behind the protection of a server and become first-class network entities in their own **right** , they must become actively involved in protecting themselves from network attacks. They must do this while cooperating with higher level applications, such as distributed file systems or database systems, to enforce the application's security policies over **storage** resources. In this dissertation, I address this problem by proposing a cryptographic capability system which enables application filemanagers to asynchronously make policy decisions while the commodity **storage** devices synchronously enforce these decisions.

This dissertation analyzes a variety of **access** control schemata that exist in current distributed **storage** systems. Motivated by the analysis, I propose a basic cryptographic capability system that is flexible enough to efficiently meet the requirements of many distributed **storage** systems. Next, I explore how a variety of different mechanisms for describing a set of NASD objects can be used to improve the basic capability system. The result is a new design based on remote execution techniques. The new design places more **access** control processing at the **drive** in order to deliver increased performance and functional advantages. Based on the performance limitations of software cryptography demonstrated in a prototype implementation of a **network attached storage** device, I propose and evaluate an alternative to standard message **authentication** codes. This **allows storage** devices to pre-compute some security information and reduces the amount of **request** -time computation required to protect the integrity of read **operations** . Finally, I discuss the availability of cryptographic hardware, how much is required for a **network attached storage** device, and the implications of adding tamper-resistant hardware to a **storage** device.

20/5/22 (Item 2 from file: 2)
DIALOG(R)File 2:INSPEC

6467708 INSPEC Abstract Number: B2000-02-6210L-205, C2000-02-5620-072
Title: Integrity and performance in network attached storage
Author(s): Gobioff, H.; Nagle, D.; Gibson, G.
Author Affiliation: Dept. of Comput. Sci., Carnegie Mellon Univ., Pittsburgh, PA, USA
Conference Title: High Performance Computing. Second International Symposium, ISHPC'99. Proceedings p.244-56
Editor(s): Polychronopoulos, C.; Joe, K.; Fukuda, A.; Tomita, S.
Publisher: Springer-Verlag, Berlin, Germany
Publication Date: 1999 Country of Publication: Germany xiv+408 pp.
ISBN: 3 540 65969 2 Material Identity Number: XX-1999-01903
Conference Title: High Performance Computing. Second International Symposium, ISHPC'99. Proceedings
Conference Date: 26-28 May 1999 Conference Location: Kyoto, Japan
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: Computer security is of growing importance in the increasingly networked computing environment. This work examines the issue of high-performance network security, specifically integrity, by focusing on integrating security into a network **storage** system. Emphasizing the cost-constrained environment of **storage** , we examine how current software-based cryptography cannot support **storage** 's Gbit/s transfer rates. To solve this problem, we introduce a novel message **authentication** code, based on stored message digests. This **allows storage** to deliver high-performance, a factor of five improvement in our prototype's integrity protected bandwidth, without hardware acceleration for common read **operations** . For receivers, where precomputation cannot be done, we outline an inline message **authentication** code that minimizes buffering requirements. (18 Refs)
Subfile: B C
Descriptors: computer networks; data integrity; message **authentication** ; performance evaluation; **storage** management; telecommunication security
Identifiers: **network attached storage** ; integrity; computer security ; networked computing; high-performance network security; cost-constrained environment; stored message digests; inline message **authentication** code; buffering minimization
Class Codes: B6210L (Computer communications); C5620 (Computer networks and techniques); C6120 (File organisation); C6130S (Data security); C5670 (Network performance)

20/5/24 (Item 4 from file: 2)
DIALOG(R)File 2:INSPEC

6001651
Title: Avantis serves up network ace
Author(s): Fawcett, S.
Journal: InformationWeek no.34 p.54
Publisher: Emap Computing & CMP Media Inc,
Publication Date: 22 July-4 Aug. 1998 Country of Publication: UK
CODEN: INFWF5
Material Identity Number: G220-98015
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P); Product Review (R)
Abstract: A major problem of adding **storage** to a network of computers-causing serious administrative and downtime headaches-is the **task** of connecting it to a network file server. Over the last year or two the industry has fallen in love with a concept called Direct **Network Attach** (DNA) **storage** , which **allows** for **storage** modules to be physically attached to a network itself, and not the file server that is running it. DNA offers a huge leap forward in the way that a network can be assembled, with the idea of plug-and-play network assembly for **storage** . One UK firm which jumped onto the bandwagon of DNA at an early stage was Avantis, which has created the CDServe family of **storage** products. (0 Refs)
Subfile: D
Descriptors: **CD** -ROMs; computer networks; file servers; **storage** management
Identifiers: computer network; network file server; Direct **Network Attach storage** ; **storage** modules; plug-and-play network assembly; Avantis CDServe **storage** products
Class Codes: D5040 (Supplies, stationery and storage media); D5020 (Computer networks and intercomputer communications)

20/5/39 (Item 1 from file: 6)
DIALOG(R)File 6:NTIS

2143270 NTIS Accession Number: ADA367675/XAB
Embedded Security for Network - Attached Storage
Gobioff, H. ; Nagle, D. ; Gibson, G.
Carnegie-Mellon Univ., Pittsburgh, PA. Dept. of Computer Science.
Corp. Source Codes: 005343001; 403081
Report No.: CMU-CS-99-154
Jun 1999 26p
Journal Announcement: USGRDR0001
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NTIS Prices: PC A03/MF A01
As **storage** interconnects evolve from single host small scale systems, such as traditional SCSI, to the multi-host Internet based systems of **Network attached** Secure **Disks** (NASD), protecting the integrity of data transfers between client and **storage** becomes essential. However, it is also computationally expensive and can impose significant performance penalties on **storage** systems. This paper explores several techniques that can protect the communications integrity of **storage requests** and data transfers, imposing very little performance penalty and significantly reducing the amount of required cryptography. Central to this work is an alternative cryptographic approach, called Hash and MAC, that reduces the cost of protecting the integrity of read traffic in **storage** devices that are unable to generate a message **authentication** code at full data transfers rates. Hash and MAC does this by precomputing security information, using and reusing the precomputed information on subsequent read **requests** . We also present a refined Hash and MAC approach that uses incremental hash **functions** to improve the performance of small read and write **operations** as well as non-block aligned **operations** .

Descriptors: Data processing security; *Internet; *Client server systems; Software engineering; Cryptography; Computer communications; Data **storage** systems; Machine coding; Network architecture
Identifiers: NTISDODXA
Section Headings: 62GE (Computers, Control, and Information Theory--General)

20/5/40 (Item 2 from file: 6)
DIALOG(R)File 6:NTIS
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2071091 NTIS Accession Number: AD-A341 735/9/XAB
Active Disks - **Remote Execution for** Network - Attached Storage
Riedel, E. ; Gibson, G.
Carnegie-Mellon Univ., Pittsburgh, PA. School of Computer Science.
Corp. Source Codes: 005343049; 423887
Report No.: CMU-CS-97-198
Dec 97 14p
Languages: English
Journal Announcement: GRAI9815
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NTIS Prices: PC A03/MF A01
Country of Publication: United States
Contract No.: N00174-96-C-0002; ARPA ORDER-D306
The principal trend in the design of computer systems is the expectation of much greater computational power in future generations of microprocessors. This trend applies to embedded systems as well as host processors. As a result, devices such as **storage** controllers have excess capacity and growing computational capabilities. **Storage** system designers are exploiting this trend with higher level interfaces to **storage** and increased intelligence inside **storage** devices. One development in this direction is **Network Attached** Secure **Disks** (NASD) which **attaches** **storage** devices directly to the **network** and raises the **storage** interface above the simple (fixed size block) memory abstraction of SCSI. This **allows** devices more freedom to provide efficient **operations** ; promises more scalable subsystems by **offloading** file system and **storage** management functionality from dedicated servers; and reduces latency by executing common case **requests** directly at **storage** devices. In this paper, we push this increasing computation trend one step further. We argue that application specific code can be executed at **storage** devices to make more effective use of device, host and interconnect resources and significantly improve application I/O performance. Remote execution of code directly at **storage** devices **allows** filter **operations** to be performed close to the data; enables support of timing sensitive transfers and application-aware scheduling of **access** and transfer; **allows** management **functions** to be customized without requiring firmware changes; and makes possible more complex or specialized **operations** than a general purpose **storage** interface would normally support.
Descriptors: Computers; * **Disks** ; Files(Records); Computations; Microprocessors; Networks; Scaling factor; **Storage**
Identifiers: Nasd(**Network attached** secure **disks**); NTISDODXA
Section Headings: 62GE (Computers, Control, and Information Theory--General)

20/5/41 (Item 3 from file: 6) - function not on storage device
DIALOG(R)File 6:NTIS
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2043285 NTIS Accession Number: AD-A332 311/0/XAB
Security for Network Attached Storage **Devices**
Gobioff, H. ; Gibson, G. ; Tygar, D.
Carnegie-Mellon Univ., Pittsburgh, PA. Dept. of Computer Science.
Corp. Source Codes: 005343001; 403081

Report No.: CMU-CS-97-185
23 Oct 97 22p
Languages: English
Journal Announcement: GRAI9806
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NTIS Prices: PC A03/MF A01
Country of Publication: United States
Contract No.: F19628-96-C-0061; ARPA ORDER-D306
This paper presents a novel cryptographic capability system addressing the security and performance needs of **network attached storage** systems in which file management **functions** occur at a different location than the file **storage** device. In our NASD system file managers issue capabilities to client machines, which can then directly **access** files stored on the **network attached storage** device without intervention by a file server. These capabilities may be reused by the client, so that interaction with the file manager is kept to a minimum. Our system emphasizes performance and scalability while separating the **roles** of decision maker (issuing capabilities) and **verifier** (**validating** a capability). We have demonstrated our system with adaptations of both the NFS and AFS distributed file systems using a prototype NASD implementation.
Descriptors: *Data processing security; *Records management; *Computer files; Data management; Cryptography; Distributed data processing; Client server systems
Identifiers: NTISDODXA
Section Headings: 62GE (Computers, Control, and Information Theory--General); 62D (Computers, Control, and Information Theory--Information Processing Standards)

20/5/42 (Item 4 from file: 6)
DIALOG(R)File 6:NTIS
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1997829 NTIS Accession Number: N19960052744
Global File System
Soltis, S. R. ; Ruwart, T. M. ; OKeefe, M. T.
Minnesota Univ., Minneapolis.
Corp. Source Codes: 012002000; M2765962
Sponsor: National Aeronautics and Space Administration, Washington, DC.; Office of Naval Research, Washington, DC.; National Science Foundation, Washington, DC.; Universities Space Research Association, Washington, DC.
Sep 96 24p
Languages: English
Journal Announcement: GRAI9711; STAR3416
Partially funded by Grants USRA-C-5555-23.
NTIS Prices: (Order as N19960052742, PC A17/MF A03)
Country of Publication: United States
Contract No.: N00019-95-1-0611; NSF ASC-95-23480
The global file system (GFS) is a prototype design for a distributed file system in which cluster nodes physically share **storage** devices connected via a network-like fiber channel. **Networks** and **network - attached storage** devices have advanced to a level of performance and extensibility so that the previous disadvantages of shared **disk** architectures are no longer valid. This shared **storage** architecture attempts to exploit the sophistication of **storage** device technologies whereas a server architecture diminishes a device's **role** to that of a simple component. GFS distributes the file system responsibilities across processing nodes, **storage** across the devices, and file system resources across the entire **storage** pool. GFS caches data on the **storage** devices instead of the main memories of the machines. Consistency is established by using a locking mechanism maintained by the **storage** devices to facilitate atomic read-modify-write **operations** . The locking mechanism is being prototyped in the Silicon Graphics IRIX operating system and is **accessed** using standard Unix **commands** and modules.
Descriptors: Unix(Operating system); *Prototypes; *Distributed processing

; *Architecture(Computers); *Computer networks; *Data **storage** ; *Data transfer(Computers); *Computer **storage** devices; **Disks** ; Computer systems design; Client server systems; Information management
Identifiers: NTISNASA
Section Headings: 88GE (Library and Information Sciences--General)

20/5/43 (Item 5 from file: 6)
DIALOG(R)File 6:NTIS

1997791 NTIS Accession Number: N19960051324
Derived virtual devices: a secure distributed file system mechanism
VanMeter, R. ; Hotz, S. ; Finn, G.
University of Southern California, Marina del Rey. Dept. of Computer Science.
Corp. Source Codes: 045598001; U6300124
Sponsor: National Aeronautics and Space Administration, Washington, DC.; Advanced Research Projects Agency, Washington, DC.
Sep 96 20p
Languages: English
Journal Announcement: GRAI9711; STAR3416
NTIS Prices: (Order as N19960051323, PC A15/MF A03)
Country of Publication: United States
Contract No.: DABT63-93-C-0062
This paper presents the design of derived virtual devices (**DVDs**). **DVDs** are the mechanism used by the Netstation Project to provide secure shared **access** to network-attached peripherals distributed in an untrusted network environment. **DVDs** improve Input/Output efficiency by **allowing** user processes to perform I/O **operations** directly from devices without intermediate transfer through the controlling operating system kernel. The security enforced at the device through the **DVD** mechanism includes resource boundary checking, user **authentication** , and restricted **operations** , e.g., read-only **access** . To illustrate the application of **DVDs** , we present the interactions between a **network - attached disk** and a file system designed to exploit the **DVD** abstraction. We further discuss third-party transfer as a mechanism intended to provide for efficient data transfer in a typical NAP environment. We show how **DVDs** facilitate third-party transfer, and provide the security required in a more open network environment.
Descriptors: Computer information security; *Security; *Virtual memory systems; Kernel **functions** ; Boundaries; Computer systems design; Document **storage** ; Local area networks
Identifiers: NTISNASA
Section Headings: 88GE (Library and Information Sciences--General)